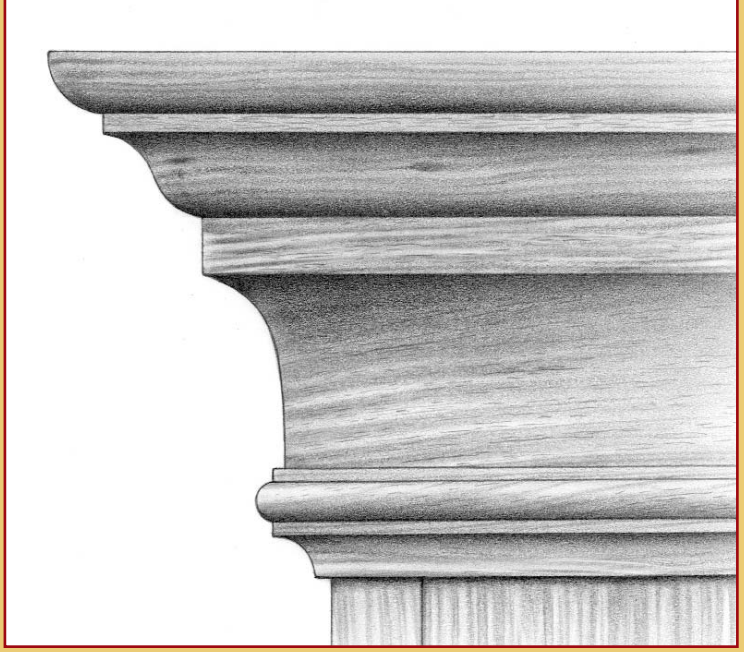
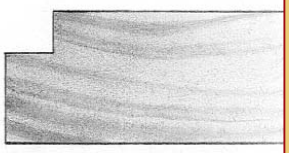


An Illustrated Guide to Crown Moldings

Combine classic profiles to match any period or style

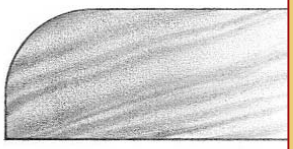
BY PHILIP C. LOWE

FILLET



A band or flat, usually vertical, that's located above or below a molding profile.

QUARTER-ROUND

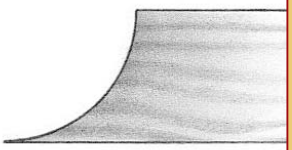


A convex curve that is one quarter of a circle.

QUARTER-ROUND WITH FILLET

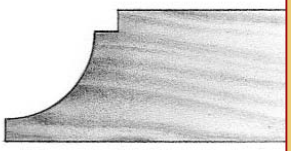
A convex curve that is one quarter of a circle with a vertical flat.

COVE



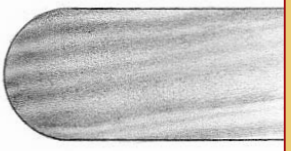
A concave curve that is one quarter of a circle.

COVE WITH FILLETS



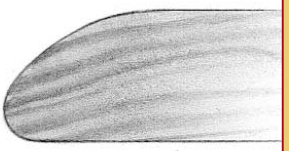
A concave curve that's one quarter of a circle with a fillet above and/or below it.

TORUS



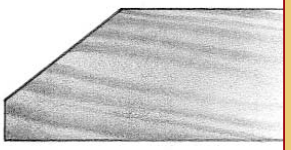
A convex semicircle also referred to as a half-round.

THUMB



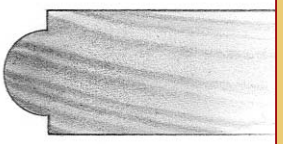
A convex curve made up of two connecting curves of different radii.

CHAMFER



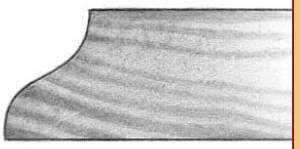
A bevel cut (usually 45°) made into a right-angled edge.

ASTRAGAL



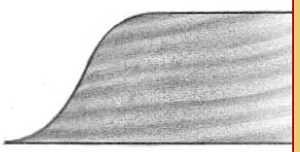
A small torus with a fillet above and/or below it.

CYMA REVERSA



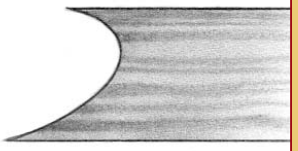
An ogee (S-shaped) curve that starts and ends in a vertical plane.

CYMA RECTA



An ogee (S-shaped) curve that starts and ends in a horizontal plane.

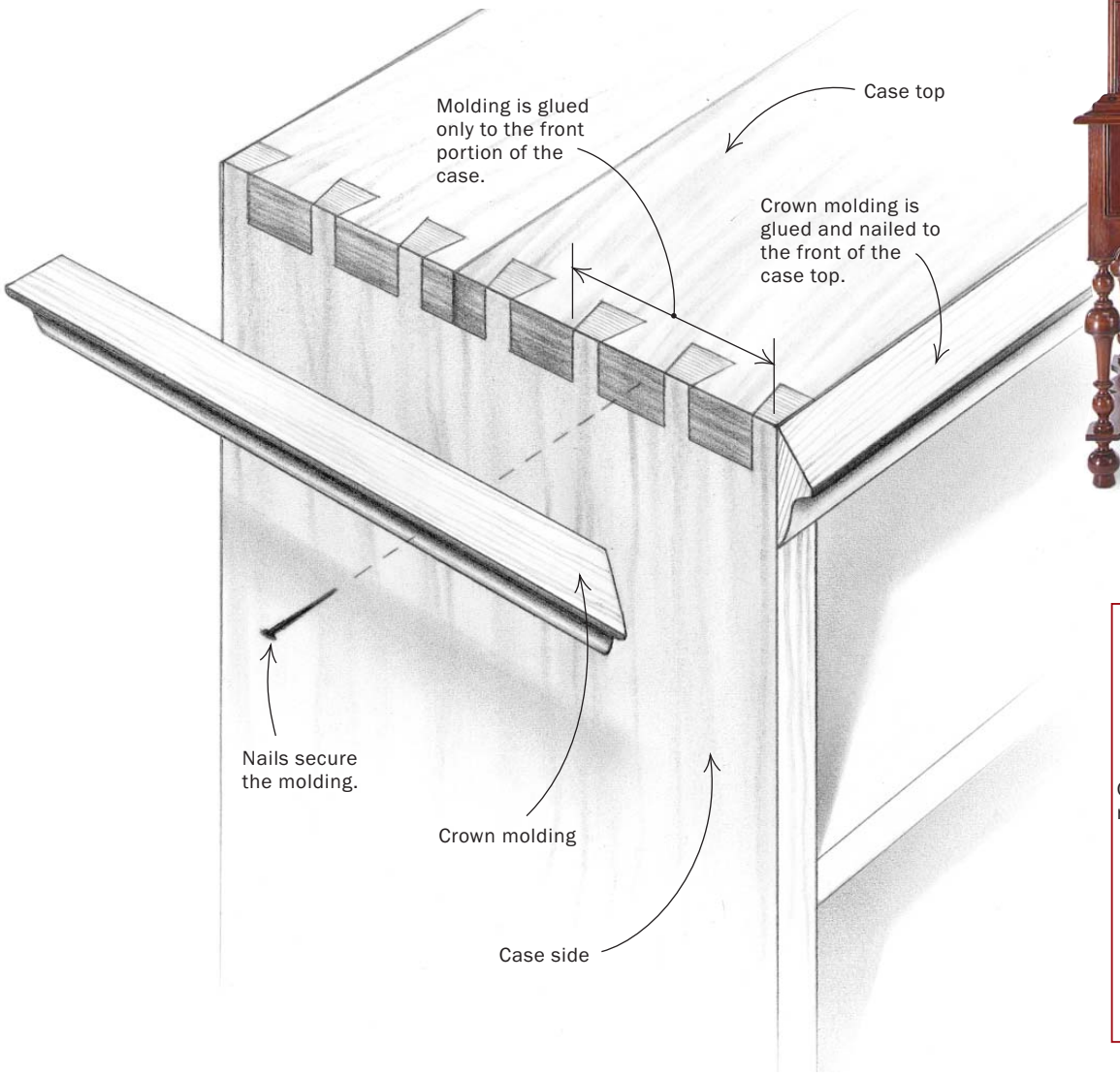
SCOTIA

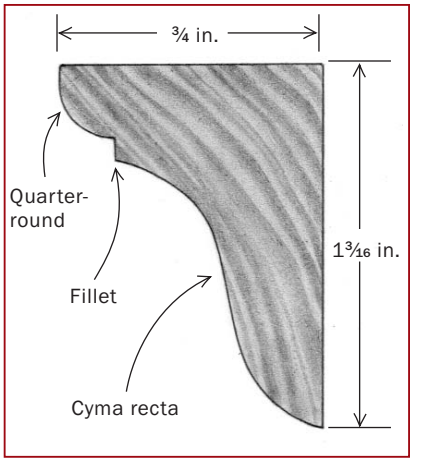


A concave curve made up of two connecting curves of different radii.

WILLIAM AND MARY PERIOD, 1690-1730

The crown moldings from the William and Mary period reflect the simple hand tools available to craftsmen of that era. Examples such as this one found in the Philadelphia area are scarce because not many were made. Although the crown is diminutive when compared with the waist molding, this is a balanced, well-integrated composition that is highly representative of the period.





Throughout the history of cabinetmaking, applied moldings have made substantial contributions to the aesthetic enhancement of case pieces. Combinations of cove, quarter-round, and ogee moldings reflect light and create shadows, adding a lot of visual interest to a piece. The crown, or cornice, also can have a practical function. For instance, I have seen them outfitted with secret drawers.

Without the horizontal finality of a crown molding or the lyrical interest that a broken pediment or a swan-neck pediment provides, the top of a case piece would stand without presence, creating a sense of lightness or weakness. In later periods, builders gave the top of a case piece the visual grounding by creating an assembly of elements known as the entablature, a term that comes from Greek and Roman architecture.

In furniture, the entablature is a composition of individual molding profiles at the top of the piece. The entablature, combined with a plain cornice or a complex broken pediment above, adds a feeling of weight, giving the eye another place to rest and another point of interest to explore.

How moldings define the period

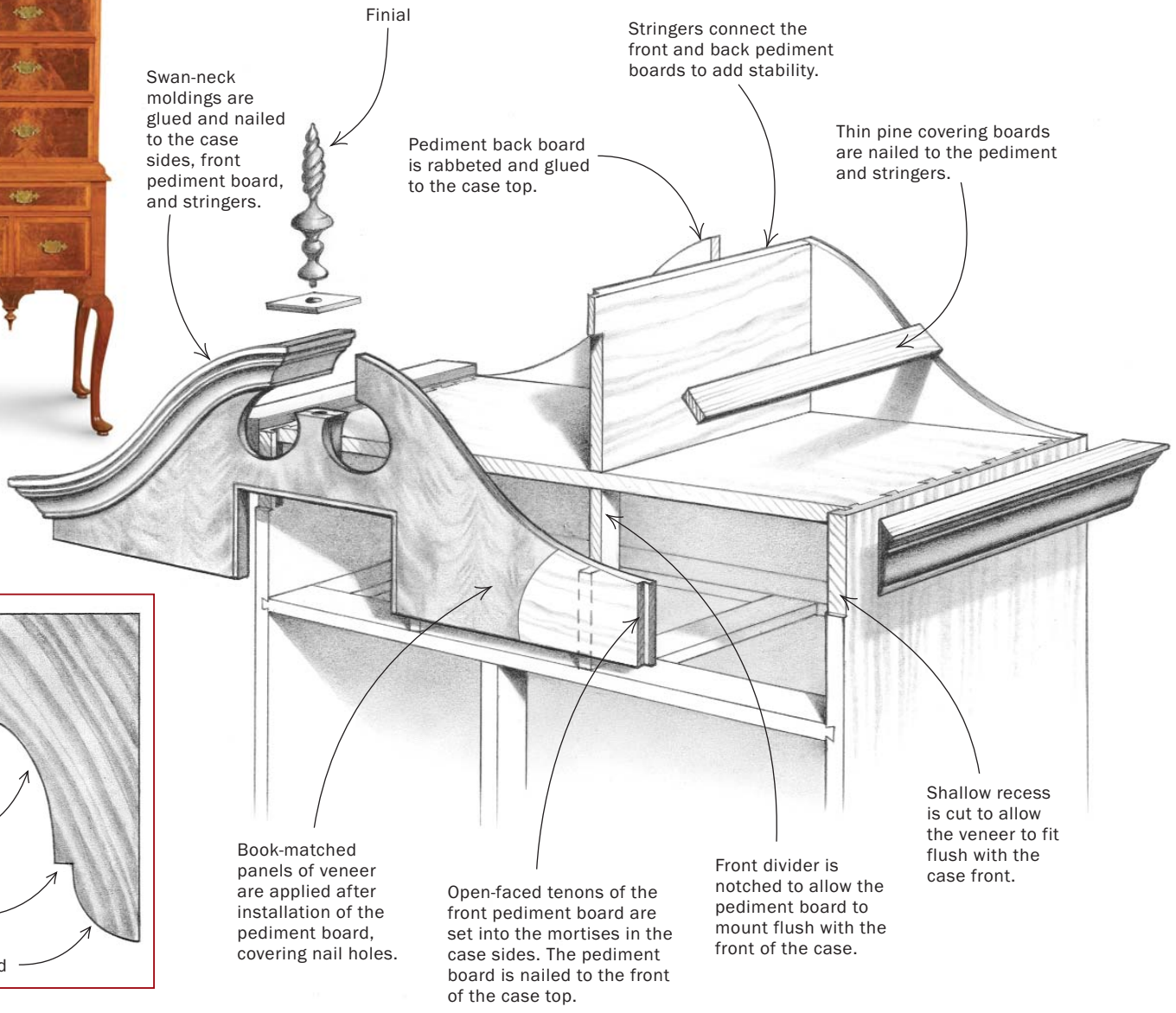
As I gaze at a masterpiece of 18th-century furniture, my appreciation for it is two tiered. Initially, I am struck by an overall presence imparted by the size and proportion of the piece. Even an untrained eye can detect an ill-proportioned piece. When a piece looks right, it feels right, too.

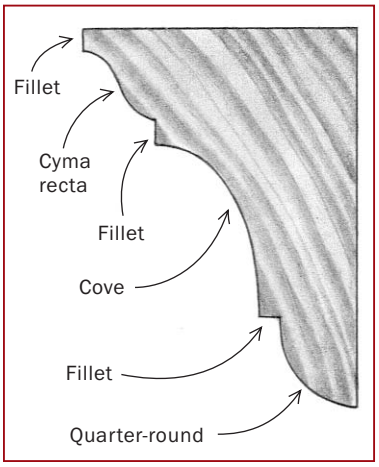
Upon closer examination, my eye travels upward, along the piece's lines and embellishment. I begin with the shape of a cabriole leg or base molding. I move on to the horizontal definition provided by the waist molding; it is a kind of aesthetic breather that prepares the eye for the vertical shift required to make a comfortable transition to the upper case. Finally, my eye is

Photo, this page: Gini Woy Photography, with permission of David J. Lunin, furniture maker; drawings: Michael Gellatly

QUEEN ANNE PERIOD, 1720-1765

The swan-neck pediment often found on pieces from Boston's north shore is unique to the Colonies and a defining element of the Queen Anne period. This justly famous form became popular in America for its sweeping grace and beauty, which, in turn, give a sense of rhythm to a composition that would otherwise seem a massive or ponderous form.





guided along the converging angled lines or sweeping curves of the pediment.

The first settlers in America brought with them European styles, such as William and Mary, Queen Anne, Chippendale, Hepplewhite, and Sheraton, which deeply influenced the furniture and architecture produced by early American craftsmen. When I look closely at the crown moldings of American furniture, I am compelled to interpret them in my own work. However, to make faithful reproductions, it is necessary first to break down and define the elements that make up these moldings. In this article, I provide examples from the William and Mary, Queen Anne, Chippendale, and Federal periods. This visual glossary of elements and representative pieces will help you develop the vernacular and the know-how to identify and reproduce accurate crown moldings in your own workshop. Note that the periods and dates are approximations. Also, styles overlap, and elements from more than one era often are present in a single piece of furniture. Each period produced certain styles of crown moldings, with makers within a period devising their own interpretations of the style. So it is impossible to make hard-and-fast definitions.

The following case pieces feature crown moldings that are representative of four distinct periods in different regions, including Philadelphia, Pa., and Boston, Mass., as well as Boston's north shore.

William and Mary highboy—The one-piece cornice of this highboy (shown on p. 75) is made up of a reverse thumb molding

Photo, this page: Karen Wales, with permission courtesy of The Marblehead Historical Society, Marblehead, Mass.

21st-century method to build a swan-neck molding

Start with a large 8/4 slab. *Bandsaw the lower edges of both moldings from one slab, which provides a stable platform during routing.*

Today's craftsmen can make swan-neck moldings faster by relying on power tools. Some handwork, however, still is required for this challenging task. Begin by making a full-size pattern of the molding (I made mine from ⅛-in.-thick plywood). When making the shapes, match them to available router cutter profiles as best you can.

A molding such as this can be made from a single, solid slab of 8/4 mahogany, dimensioned to 12 in. by 26 in. Both halves can be cut from this piece. When laying out the moldings, be sure that you will be cutting the lower edge of the molding and working your way up on each face of the slab. Working from the top down would require you to position the wood between the fence and the cutter, a dangerous practice that should be avoided.

Cutting out each piece first also is a bad idea because they would rock as the shapes near completion. It is better to cut each face from the solid foundation of the slab. Also, remember to leave an extra 3 in. or so at the lower ends so that they can be mitered later.

MAKE SMOOTH CURVES

Bandsaw to the two outer curved lines that represent the lower edge of each molding. Then, in this order, shape the molding using a spokeshave, a rasp and a file (for spots that the spokeshave can't reach), and finally a card scraper. Take the time to finish this face before cutting. If there are bobbles in the molding face, the router bits will copy those bumps along the way.

Next, use a marking gauge to lay out the various elements in the moldings.

Rough out the blank on a router table. *A straight bit is used to remove the bulk of the waste in a series of steps.*

BUILD A BIRD'S-BEAK JIG FOR CURVED ROUTING

To steady the workpiece for routing, I made an auxiliary fence with a bird's beak deep enough to accommodate the arc of the curve. A centerline on the face of the outer edge of the bird's beak is the single line of contact between the molding and fence as the molding is pushed through the cut.

Use a straight bit to rough out the work. These cuts leave a series of steps in the molding. Next, use a 1½-in. half-round (core-box) bit to cut the large cove. Then use a ¼-in.-radius roundover bit to cut the first half of the cyma recta and finish with a ¾-in. half-round (core-box) bit.

Next, cut the cove. *Take multiple passes using a large half-round (core-box) bit.*

Cut the cyma recta. *Start with a ¼-in.-radius roundover bit. Finish with a ¾-in. half-round (core-box) bit.*

Use a chisel to carve the top edge. *To avoid tearout, always carve from the the convex, high point of the curve to the low point of the concave area.*

CARVE THE REST BY HAND

The quarter-round has to be hand-carved because its height is beyond the reach of most router bits. I carved this quarter-round with a 1-in. chisel, finishing with a card scraper.

Photos, this page: Karen Wales

CHIPPENDALE PERIOD, 1755-1785

Later examples of the Chippendale style reflect the classical architecture of the time. Elements of the pediment and entablature are superbly proportioned in this massive piece from the Boston area. The rich combination of dynamic, curved shapes with the checkered dentil moldings draw the elements together in an expression of power and achievement.

and fillet placed above an ogee, or cyma recta. Although it may appear that these moldings were made with large molding planes, I believe that the cabinetmaker of this period would have used three separate planes. The coffin or smoothing plane would have been used to bevel the board, to create a chamfer, and to round off the tip of the thumb molding and the convex part of the ogee. For the fillets, a rebate would have been the plane of choice, and a hollow would have been used to cut the concave shape in the ogee.

I find this molding particularly striking in spite of its drawbacks. It lacks proportion between the waist and the cornice moldings. The waist is much larger in scale when compared with the cornice. Yet, overall, it has a commanding effect.

Queen Anne highboy—The swan-neck pediment is a defining element of the Queen Anne period. It starts with two fillets sandwiching a cyma recta (see the drawing on p. 76). These elements are supported by a cove, followed by another fillet. The pediment then is completed with a quarter-round at its base.

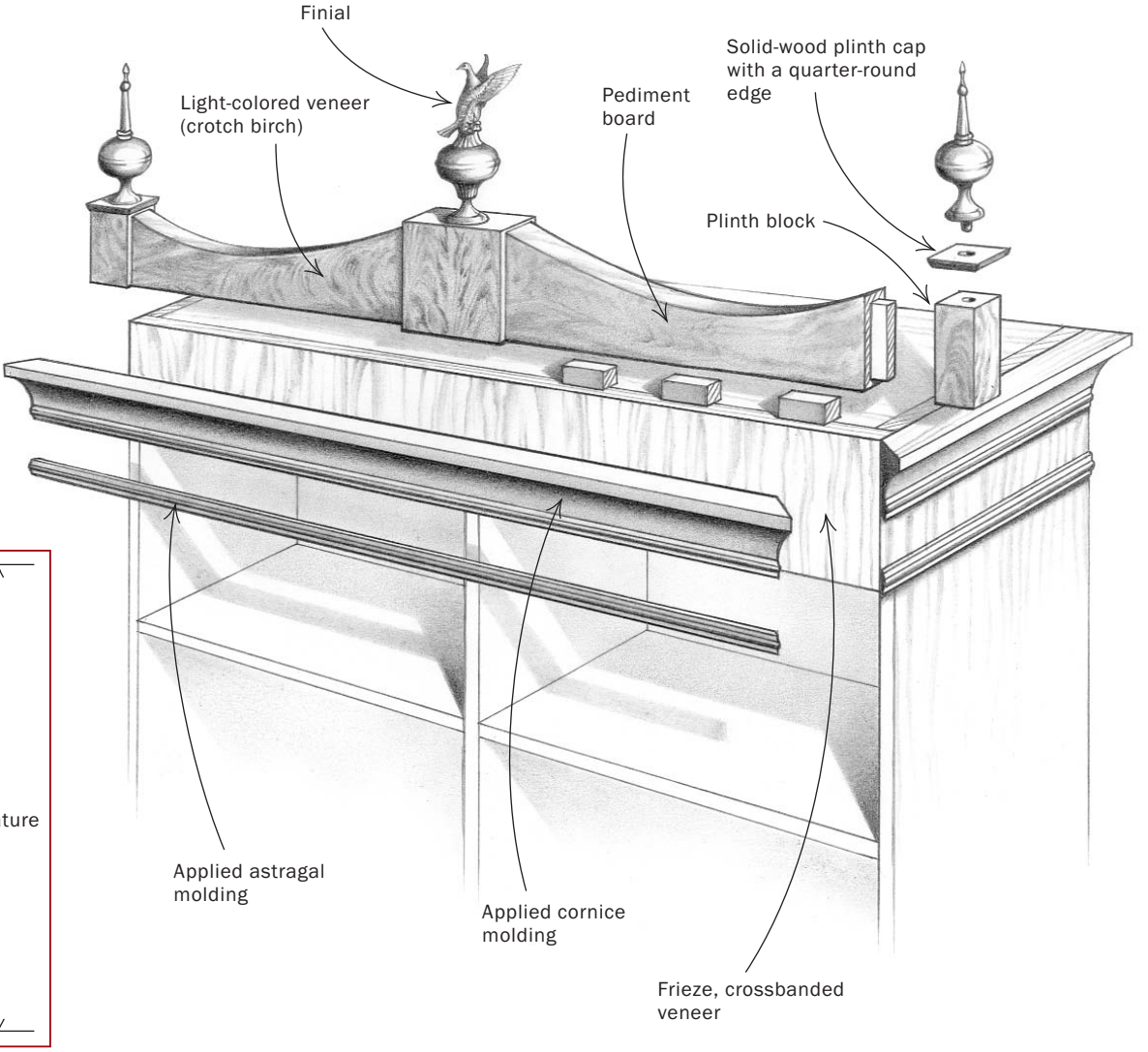
In the mid-1700s, the swan-neck pediment was made up of one piece shaped almost exclusively with carving tools and scrapers. This represents a high level of skill because the craftsman had to saw a graceful S-shape while taking a profile from the side cornice molding and successfully carrying it along this dramatic swan-neck shape.

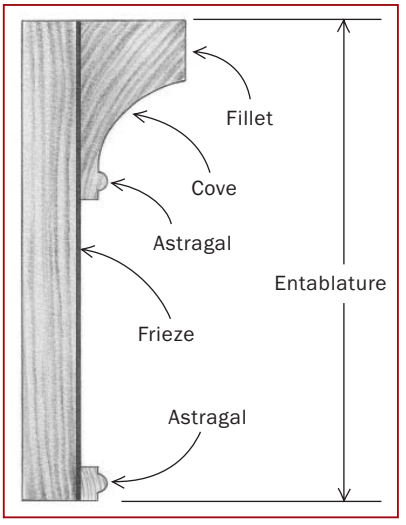
Chippendale chest-on-chest—Chippendale moldings transitioned from the Queen Anne period in a couple of unique ways. In most regions, the use of the swan neck continued into the Chippendale style; however, later examples reflect the classical architecture of the time.

Photo, this page: Karen Wales, with permission courtesy of the Cape Ann Historical Museum, Gloucester, Mass.

FEDERAL PERIOD, 1775-1815

Federal casework, often built in Boston and on Boston's north shore, shows a toning down from the elaborately composed cornices of previous periods. Instead, makers of the era relied heavily on the use of highly figured, contrasting veneers, which added great visual interest to their pieces.





The broken pediment illustrated on the facing page is a stunning representation of this evolution. The moldings on the pediment of this chest-on-chest are the same as those in the entablature—but with the addition of a cyma recta on the very top. The cornice sits upon a pulvinated (slightly curved) frieze. The architrave is a stacked series of fillets and cyma reversas. All of this is carried by a classical pilaster (a half column attached to the front of the case), which leads to the base molding and the pedestal that sits inside the waist molding.

Federal desk with secretary—The Federal period really can consist of Hepplewhite and Sheraton furniture; both English styles influenced furniture design in the New Republic during this time. Federal casework shows a toning down from the elaborate cornice designs found in earlier periods.

The pediment of the piece shown above is made up of three pedestals and a connecting pediment board. The two end pedestals are capped with a solid-wood plinth cap with quarter-round edges and brass finials. The central pedestal has the same treatment, but perched upon it is the symbol of the Republic—the American Eagle. The use of crotch birch, veneered and inlaid, gives striking contrast. The veneered pediment lightens the overall appearance. The maker of this piece still employed a restrained entablature with the use of the fillet and cove on top of a bead with fillet. The frieze is crossbanded mahogany veneer (veneer applied vertically), and the architrave a mere astragal. This period relied heavily on the use of veneers and the contrasts they provide. □

Philip C. Lowe runs The Furniture Institute in Beverly, Mass. For more information on classes, go to www.furnituremakingclasses.com.

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