

Period Moldings

A primer on these touchstones of Neo-Classical architecture

by Norman L. Vandal

Moldings are structurally non-essential building elements that help ease the transitions between large, primary structural elements. In Classical Greece and Rome, these primary elements were the plinth, the column, the capital, the entablature and the pediment (these and other architectural elements are explained in the Glossary on the next page). Over the years, Classical orders—the interrelationship of the dimension, proportion and location of these elements—were established. Composed of both structural and non-structural elements, they became accepted as proportionately correct and aesthetically pleasing. These strict proportions were adapted much later, when a maturing and increasingly humanistic Europe turned to the Classical past for architectural inspiration.

The Neo-Classical period lasted 150 years or so, and passed through several phases, known in the United States as Georgian (or Colonial), Federal and Greek Revival. There was no abrupt chronological dividing line between these styles, and in some cases overlap

is apparent (see *FHB* #1, pp. 48-51). The Classical forms were subject to various vernacular interpretations by country builders, who were quick to improvise. A craftsman who owned planes for making Federal moldings wouldn't have been likely to discard these tools and get new ones just because the Greek Revival style happened to be in fashion.

Nonetheless, each of the periods is characterized by the use of particular moldings to embellish essential architectural components. These moldings are distinctly different in each period. On pp. 61-63, the profiles of some of the moldings most characteristic of the different periods are drawn to scale (a profile is the combination of curved and straight parts that form a well-proportioned, graceful whole). They can help you date or restore period structures.

The Greeks and Romans carved their moldings in marble or stone, or cast them in aggregate. The inherent weaknesses in the stone were design determinants, and thus thin edges and steep projections were avoided. As

a result, their moldings were often bold and bulky in section.

When Neo-Classical architecture began to catch on in late 17th-century England, however, wood was the most common material for residential building. All of these moldings were cut with wooden planes that were designed for specific profiles. Some of the simpler configurations were produced on the building site, but the larger, more elaborate ones (bed and cornice moldings and bolections, for example) required specialized planes and the expertise of the shop joiner to make them correct and consistent. Moldings were cut by hand this way until the middle of the 19th century (see *FHB* #11, pp. 36-41). I do a lot of restoration and reproduction work, and I still make and use such planes.

Here's a short primer on the characteristics of the three periods.

Georgian period (c. 1720 to 1790)—At this time, designers and builders in England were abandoning the motifs of the Jacobean period,



Georgian entrances were often elaborate, formal and robust. Builders imitated Roman moldings, and based their details on segments of the circle.



Federal details were still based on sections of the circle, but they were lighter and more delicate. Windows had thinner mullions and, often, semicircular tops.



Greek Revival detailing was based on the ellipse. Architects and builders consciously turned to the cradle of democracy as an appropriate model for American architecture. Columns, pilasters and moldings were larger, but simpler. Facades became grand, often harking back to the Parthenon and other Greek temples.

Architectural elements

Pediment: The triangular space that forms the gable end of a peaked roof.

Entablature: The horizontal portion of a structure, which is supported by the columns. The entablature, from bottom to top, is composed of the architrave, the frieze, the cornice, and, in some interpretations, the pediment.

Cornice: Outside, the uppermost decoration on a structure, found either at the top edge of the pediment or at the top edge of the entablature where a pediment is not present. Inside, the molding at the intersection of wall and ceiling.

Fascia: The vertical face of the projecting cornice. The cornice molding is applied to the fascia.

Soffit: The horizontal underside formed by the projecting cornice as it overhangs the frieze.

Bed: A molded decoration at the intersection of the vertical frieze and the horizontal soffit. In profile a bed molding is similar to or the same as the capital.

Frieze: The portion of the entablature directly below the soffit. At the top edge of the frieze, below the soffit, is the *bed molding*.

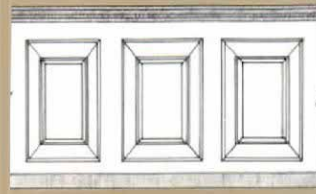
Architrave: Outside, the lowest portion of the entablature, directly above the capital or the top of the columns. The moldings that decorate the architrave are often repeated on interior and exterior window and door casings, and these are also called architraves.

Capital: The molded decoration found at the top of a column or pilaster. It softens the transition between the vertical column and the horizontal entablature.

Pilaster: A vertical element made to resemble a column partly set into the wall.

Plinth: The block that the architrave or column sits on.

Chair rail: A molding running around a room at the height of the back chair posts, probably introduced to protect wall surfaces from being marred by furniture, but clearly accepted as a decorative element.



Wainscot: An interior wall treatment using boards or panels to cover the wall from floor to about window-sill height. Wainscot can also be a much broader term used to describe a manner in which boarding is used in various applications, including the construction of a particular form of furniture.

Moldings

Astragal: A convex, semicircular molding—usually applied—which projects above the surface of a flat plane.

Bead: A small, rounded molding usually found at the edge of a board. It is usually planed or carved, not applied. The most common architectural molding.

Quirk bead: A bead that has a narrow groove along one edge, and so appears to be separate from the surface upon which it is planed. Other moldings, such as ogees, can also be quirked.

Thumb nail bead: A molding in the form of a quarter-round, planed at the edge of a board with a slight step down from the surface upon which it is cut. Usually found on the rails and stiles of Georgian doors and fielded panel walls.

Bolection: A profile or group of moldings that separates two planes and projects from the surface of both. Usually found surrounding Georgian fireplaces.

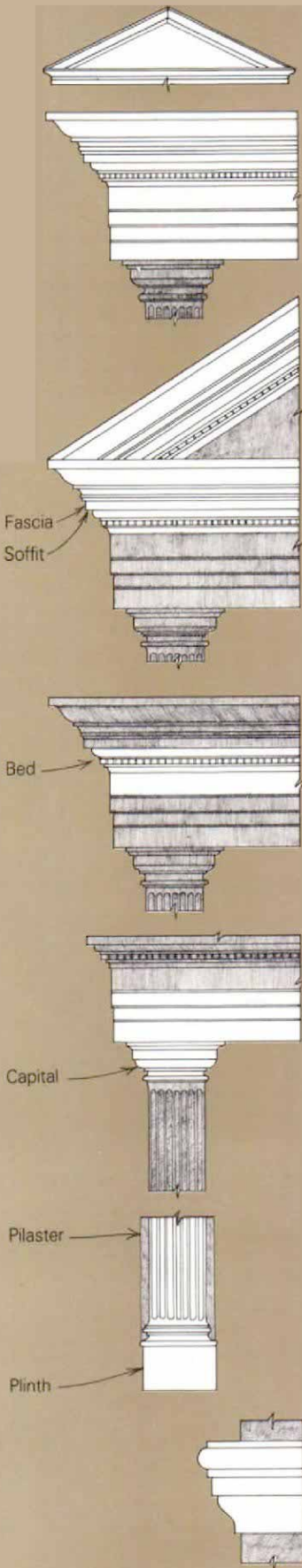
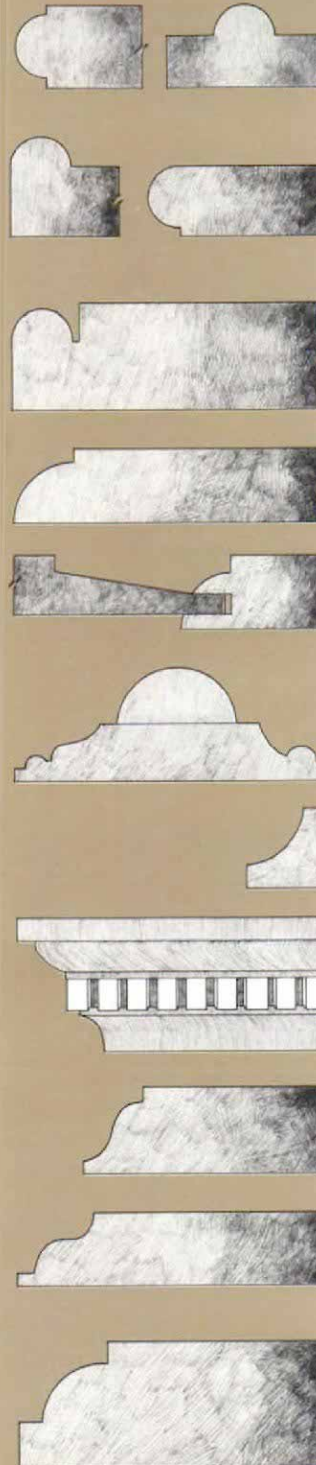
Cove: A rounded, concave molding, sometimes called a *scotia*.

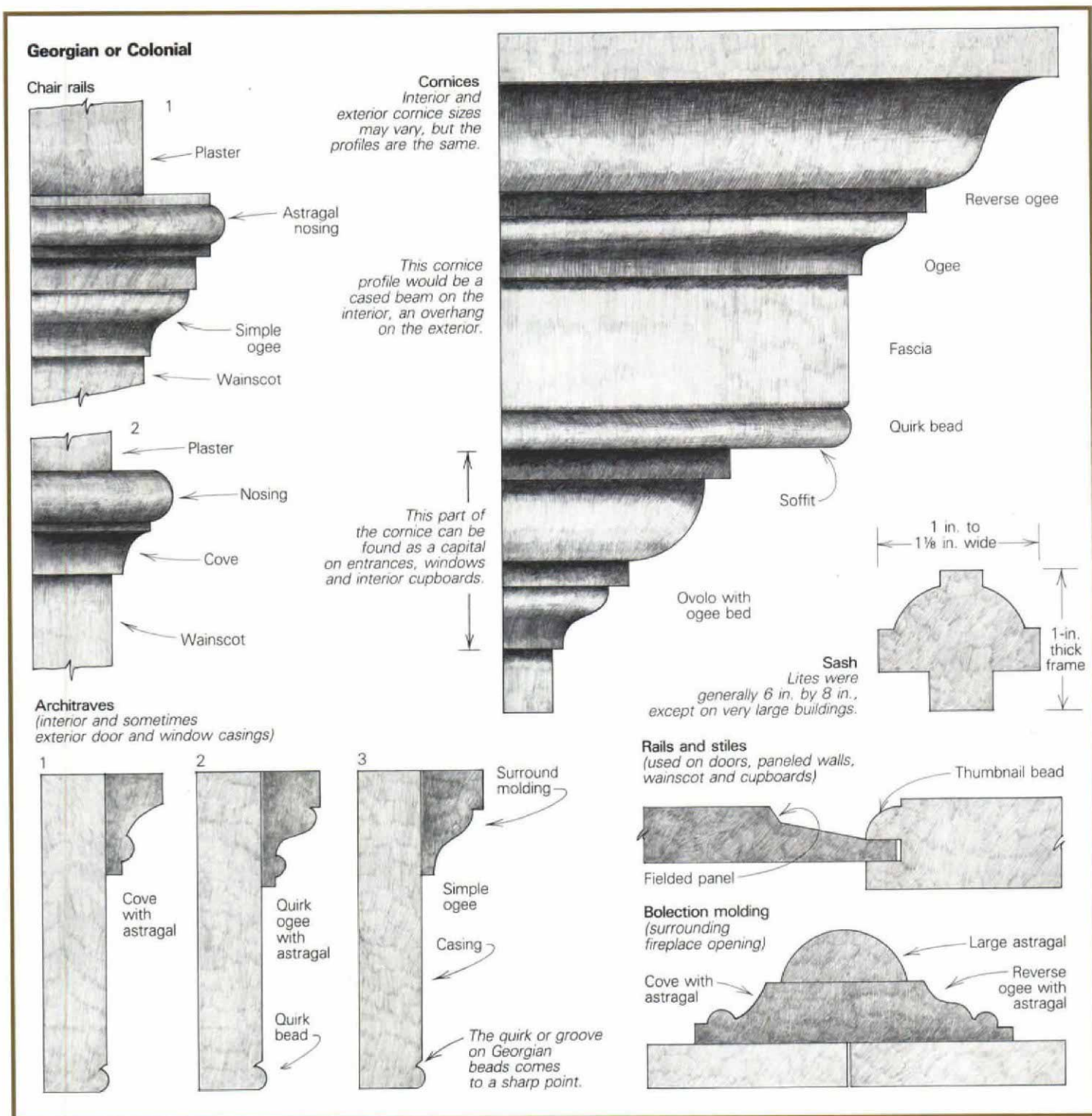
Dentil: A small, rectangular block in a series that project like teeth. Dentils are usually found as elements in a cornice, and are thought to represent purlins projecting beyond rafters.

Ogee: A molding that is formed by a continuous double curve, concave below, convex above. Sometimes called *cyma reversa*.

Reverse ogee: Also called *cyma recta*. An S-shaped molding convex below, concave above.

Ovolo: A convex molding—a quarter circle in Roman architecture, but a more elliptical curve in the Greek—which steps down from the surface on which it's planed and has a step at the bottom end of the curve.





which was characterized by the use of stone and masonry in early attempts to imitate the Classical forms. Wooden houses began to replace stone, and this led to more refined Classical lines. Guidebooks were published in England which heralded the new style, called Georgian after the four Hanoverian King Georges whose reigns began in 1714. The trend crossed the Atlantic and took hold in the increasingly prosperous Colonies, where builders were quick to abandon the older, almost medieval styles.

Georgian buildings were larger and more symmetrical than their predecessors. Elaborate entrances that resembled scaled-down

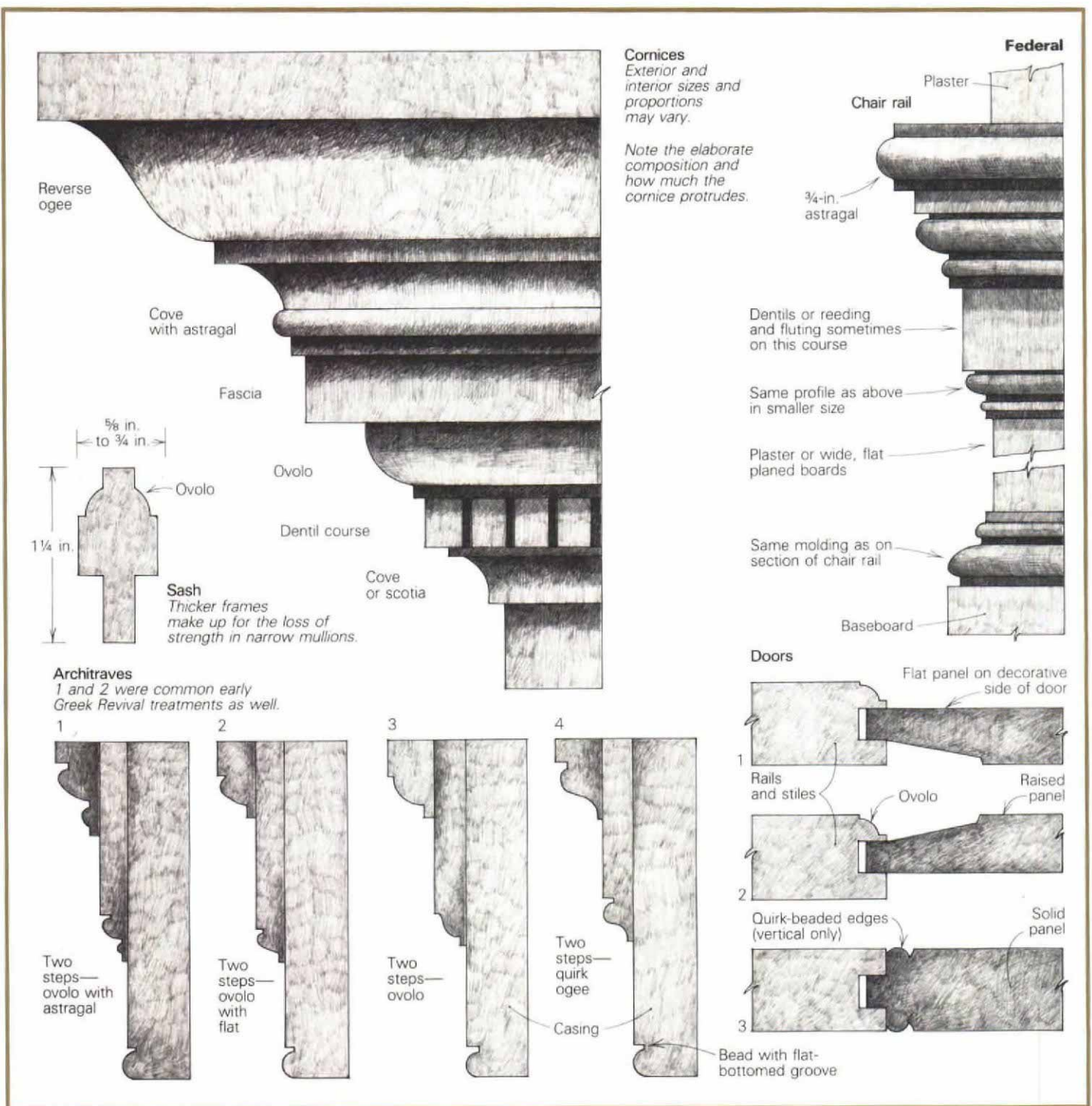
Classical temples were composed of pilasters, entablatures and ornate pediments. The larger windows were treated with capitals or cornices. Bed and cornice moldings were applied to soffits and fascias. The overall impression was massive, formal and ornate.

Inside, the austerity of the Pilgrim-century house gave way to rich ornamentation, and moldings became an important design element. Posts and girts, formerly left exposed, were cased with pine. Ceilings were plastered. Paneled walls and wainscot came into vogue, along with appropriate Classical moldings. The fireplace wall became a focal point, with the opening surrounded by a large molding

called a bolection. Cornices at the intersection of wall and ceiling were the crowning touch.

The moldings of this period were bold and heavy. Their curves, like those of the Roman moldings they imitated, were based on segments of the circle. American builders interpreted the Classical style literally, and the molding profiles were not really elegant or refined. But this period did signal the acceptance of moldings as necessary elements in architectural ornamentation.

Federal period (c. 1790 to 1825)—This post-Revolution style was also spawned in England, where it is called Adamesque, after



the brothers, Robert and James Adam. Boston architect Charles Bulfinch brought the new forms back from England and used them in several noted buildings, among them the Massachusetts Capital. Asher Benjamin, a student of Bulfinch's, heralded the new Federal style when he published his builder's guide, *The Country Builder's Assistant*, in 1797.

During this period, the Classical models in molding ornamentation were refined. Joiners took advantage of the fact that wood could be worked to yield thinner edges and flatter projections. Lightness and delicacy became the new guidelines of design.

Buildings were given a lighter and airier

feeling. Windows got bigger again. The low, squat appearance of Georgian structures was replaced by a sense of verticality.

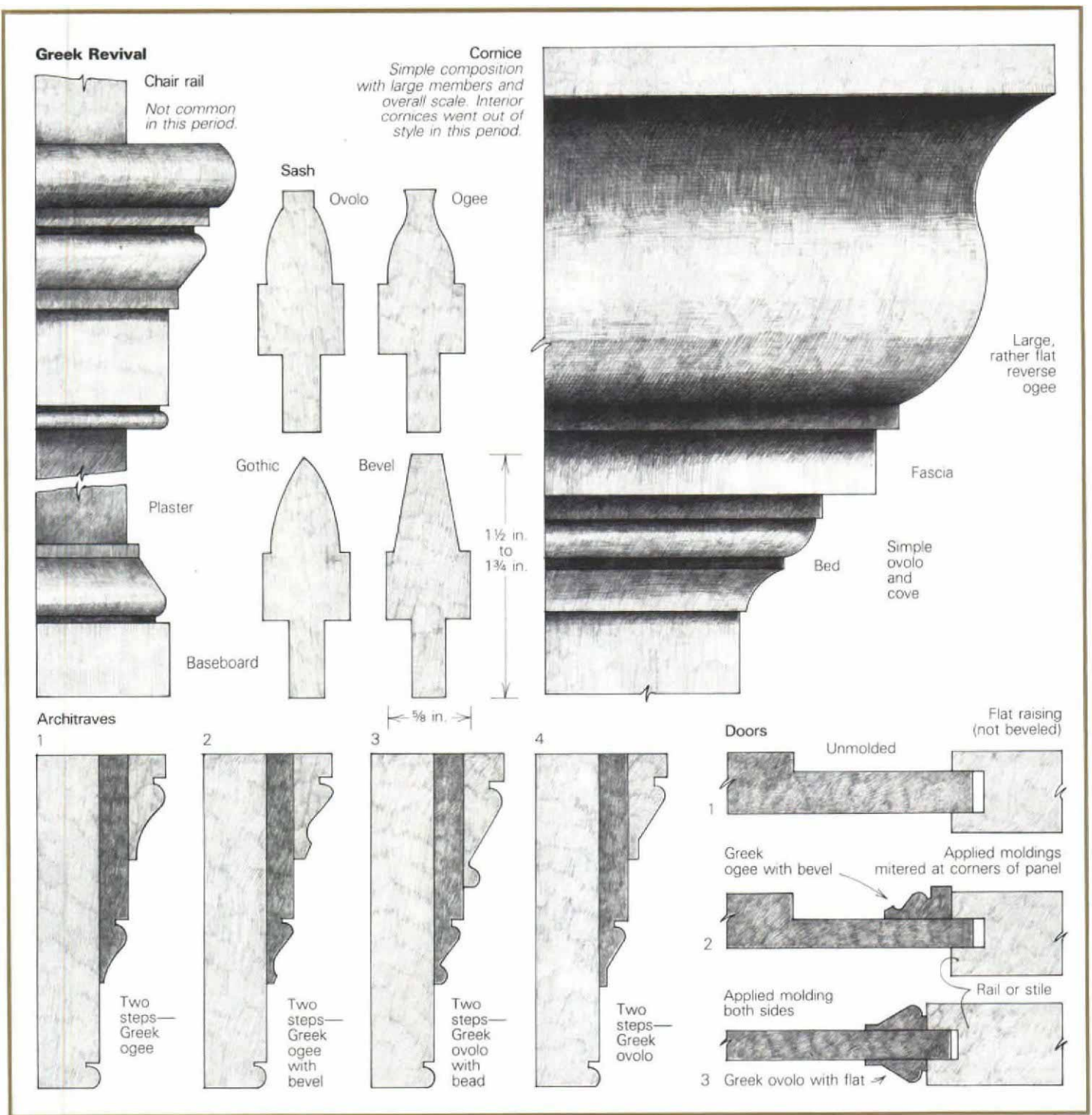
The larger window panes had thinner mullion profiles. Federal entrances were reduced in scale, and semicircular gable-end windows became popular.

Inside Federal-style houses, mantelpieces, often with pilasters and carved friezes, became focal points in formal rooms. Plastered surfaces replaced paneling in many parts of the house. Wainscot gradually disappeared, leaving only the molded chair rail and the baseboard. The interior cornice was decorated but lightened. The large expanses of plas-

ter served to set off the lighter and more delicate moldings, and expressed their new importance. Moldings were meant to be noticed and appreciated.

Greek Revival period (c. 1820 to 1840)—

This was a time of conscious return to Greek forms, which were considered to be purer than the Roman forms used in earlier periods, and more suitable for the architecture of a young republic. The Greek differs from the Roman in that all parts in the order are larger, and convey a sense of solidity and simplicity. There are fewer ornamental members than in the Roman, which on large structures can be



less confusing. The entablature is larger, with more room for ornamentation.

Roman molding profiles are composed from segments of a circle; Greek moldings from segments of an ellipse. During the Greek Revival period, it was believed that the flatter, elliptically shaped moldings offered a more pleasing reflection of light from their surfaces. The rounder Federal moldings began to fall into disuse. In some rural interpretations of the Greek Revival style, flat, unmolded stock was substituted for moldings, and the effect was quite pleasing.

The new Greek Revival style was a marked departure from the Federal period, and Asher

Benjamin kept pace with the times. The sixth edition of his new guide, *The American Builder's Companion* (1827), presented drawings of the Greek orders for the first time, and the impact was tremendous.

On a Greek Revival exterior, the larger proportions of columns and pilasters, the wider entablatures and the larger yet simpler pediments and cornices give Greek Revival structures a solid appearance reminiscent of ancient Greek temples like the Parthenon. The gable end, turned to face the street, became the most important facade. Elliptical sash supplanted the Federal semicircle over entrances and in gable ends. Pedimented entrances lost

popularity, and sidelites were used instead of a transom above the door.

The biggest change inside was that the fireplace was replaced by the more efficient woodstove. As a result, the mantel nearly disappeared. Interior cornices were deleted, as were chair rails. A movement to elevate the staircase as the focal point, which had its roots in the Federal period, culminated in the Greek Revival period with the design and execution of the free-standing elliptical staircase, a marvel of Neo-Classical architecture. □

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