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CHIMNEYS

Robert S. Gamble

Historical Notes on Alabama Chimneys

Placement

The typical chimney in early and mid-19th century Alabama was placed at one or both ends of a structure. Usually the chimney was extruded from the main wall plane, although sometimes it was incorporated into the end wall itself as a flush chimney. A variant on the flush chimney arrangement was the partial extrusion of the chimney from the wall plane. (fig. 1) While flush chimneys normally occur in masonry structures, they are on rare occasions also found in frame buildings, one example being Tusculumbia's 1825 Pearsall house. This treatment is apparently a holdover from eighteenth century practice in Maryland, Virginia, and the Carolinas, and may denote a building of early vintage.

The central chimney stack, with back-to-back fireplaces serving two or more rooms, was widely used in early Alabama for dependency structures such as cookhouses and servants' quarters. It was also a feature of the so-called "saddlebag" type of log house, in which two side-by-side log rooms shared a common chimney between them. Later, it occurs in the two-room factory dwellings which were provided the workers in such early Alabama industrial communities as Prattville. Because most larger Alabama houses had bisecting hallways, the central chimney was seldom if ever employed for more pretentious early and mid-19th century dwellings - in contrast to New England practice.

Increasingly common from the mid-19th century onward, however, were interior chimneys arranged between pairs of rooms on either side of a central corridor. In the Victorian era this, indeed, became the prevalent domestic chimney arrangement - with such chimneys usually projecting above an asymmetrical mass of ornamental gables.

Materials

To most primitive chimneys in early Alabama were of the "mud and stick" variety. Here, a mud-based plaster or clay was thickly applied to a rude frame sub-structure of overlaid logs or planks. Even when the lower part of the chimney, enclosing the firebox, was constructed of fieldstone, the narrow chimneystack above might be composed of such a mud and stick compound. Impermanent by their very nature, and highly susceptible to fire unless constantly maintained, mud-and-stick chimneys were usually replaced as soon as practicable by more permanent constructions of brick or stone. Hence, few mud-and-stick chimneys survive today.

Although brick was the favored medium for chimney construction throughout Alabama, stone was also used in areas where it was available in quantity. Thus stone chimneys are likely to be found concentrated in such limestone regions as the Coosa and Tennessee river valleys and in the contiguous mountain counties; likewise in the lower Alabama-Tombigbee river basin of southwest Alabama, where local sandstone quarries furnished building material from a very early date.

In many clapboarded rural houses the chimneys were a combination of stone and brick - built of roughly chiseled random ashlar limestone up to the "shoulders" where the chimney narrows down to form the

flue that extends above the roof. (fig. 2) The top portion of the chimney was then completed with brick. At first this presents a strange and makeshift appearance, but it is practical in that the stone was readily available and cheaply prepared and the brick was not. The brick was apparently used for the upper flue because it was easier to lift to the 20-30 foot height and easier to work with in building the narrow upper flue.

The Late Victorian emphasis upon decorative surface treatments produced some chimneys embellished with terra cotta flues and ornamental tiles. Similarly, the Craftsman movement in the early 1900s spawned the construction of chimneys from such natural materials as cobblestone and flint, so as to lend variety of texture and of visual appearance.

Frequently during the early and mid-19th century, chimneys in Alabama were stuccoed. Often the stucco was then marked off or scored to resemble large blocks of stone. If such stuccoing was fashionable at this period, it also served a practical purpose. Much Alabama brick - especially in the piedmont and coastal plain - was made of sandy clay. Hence, it was particularly susceptible to spalling and deterioration. A coating of stucco thus sealed and protected the chimney.

Characteristics of Alabama Chimneys

A fundamental characteristic of the earliest chimneys in Alabama is apt to be their generous size, surprising perhaps in a deep southern climate. A typical chimney built before 1860 may range from six to seven feet or more in width at the base, and over two feet in thickness. Kitchen chimneys may be even larger. One may also observe subtle regional variations in form and size. For instance, chimneys in the extreme southern part of the state tend to be not only smaller in their overall dimensions, but also distinguished by a foreshortened base which breaks into the stack just above the firebox. (fig. 3) Upper chambers were often left unheated through South Alabama's short, mild winters.

As coal grates gradually replaced wood-burning fires, chimneys everywhere became smaller in size, with a particularly noticeable reduction from about 1870 on.

Larger houses built between 1880 and 1900 often boasted elaborately treated interior chimneys, a single one of which might carry the flues from several fireplaces. These flues, thrusting from the top of the chimney stack, became part of the ornamentation, while the sides of the chimneys might at the same time be elaborately worked with ribbing and patterned brickwork. (fig. 4) This stylish treatment, of course, had nothing of the regional nuances that sometimes marked chimney construction in an earlier and more isolated period of the state's history.

Almost universal in 19th century Alabama chimney construction is the use of stepped - as opposed to sloped - weatherings (the weatherings of a chimney being the inward-breaking haunches above the chimney base, where the base joins the narrower stack). The stepped configuration of the weatherings is normally emphasized by a corbel at the base of each weathering, this corbel almost invariably being composed of two courses of laterally projecting brick. (fig. 5A) From each corbel, the bricks of each weathering are then stepped progressively inward to the chimney stack itself.

Very rare and usually very early - in fact, another 18th century holdover - are chimneys with sloped weatherings. Here, the weatherings are composed of bricks laid end-wise in a diagonal from the chimney base to the stack. (fig. 5B) In either case - whether the weathering is stepped or sloped - the chimney stack usually rises to a cap which likewise consists of two or three courses of brick, corbelled outward. (fig. 6) Sometimes, though not often, cut stone may be used for the chimney cap itself.

Another characteristic feature of early and mid-19th century Alabama chimneys is the massive, corbelled foundation which earmarks many of them. (fig. 7) This foundation may consist either of brick or rough-hewn stone. In cases where brick is employed, the corbelling may extend as much as ten courses outward from the main vertical plane of the chimney base. The rationale for such massive foundation work is obvious where the primary building material is wood - the chimney then having to carry its own weight entirely and be braced so as not to lean outward.

Still another common feature to be observed in chimneys dating from the early and mid-19th century is the breaking of the chimney stack away from the main wall of the house above the weatherings. (fig. 8) This was for fire protection, since the brick flues were unlined and could develop holes where mortar joints deteriorated. A hole in the flue could allow sparks to escape from the chimney stack into the attic. A freestanding stack lessened the chances of this occurring and resulted in an attractive appearance as well. Sometimes the stack may break as much as six or eight inches from the main wall or gable end of the structure it serves, though normally the space is only about four inches wide.

While most chimneys in early Alabama were devoid of ornamentation, there are a few extremely rare examples of what is known as “diapering” or “diaperwork.” (fig. 9) Originating in the Middle Ages and quite widespread in colonial America, this is the practice of placing glazed brick headers in a diamond or lozenge pattern on the face of the chimney as a sort of rudimentary embellishment. Perhaps the finest example of diaperwork chimneys in Alabama were those of the Jacob Green house in St. Clair County - destroyed in 1982. Diaperwork chimneys also occur at the Sellers-Henderson house in Wilcox County.

Almost equally as rare in Alabama is the chimney accessory known as the “chimney pent.” (fig. 10) Often times found on 18th century houses of Tidewater Maryland, Virginia, and the Carolinas, the “pent” is the small shed-roofed closet space abutting one side of the chimney. Only a handful of Alabama examples have been documented, although others probably once existed. Typically, the chimney pent flanks one or both sides of the chimney and may be cantilevered from the main foundation of the house.

References:

Sources for information on the care and maintenance of chimneys include a number of articles and brief squibs published over the past decade in *The Old-House Journal* or *The Old-House Journal Compendium* (Woodstock, N.Y.: The Overlook Press, 1980):

“Chimney Check-Up,” *OHJ Compendium*, p. 64. Briefly details some rudiments of chimney maintenance.

“Chimney Fires From Stoves,” *OHJ Compendium*, pp. 212-213. Outlines cautionary steps to prevent chimney fires, including a list of “Twenty causes of chimney troubles and their cares.”

“Repairing Old Chimneys,” *OHJ Compendium*, pp. 193-196. A general guide to old chimney reparation.



Figure 1 - Typical chimney placement in early American buildings.

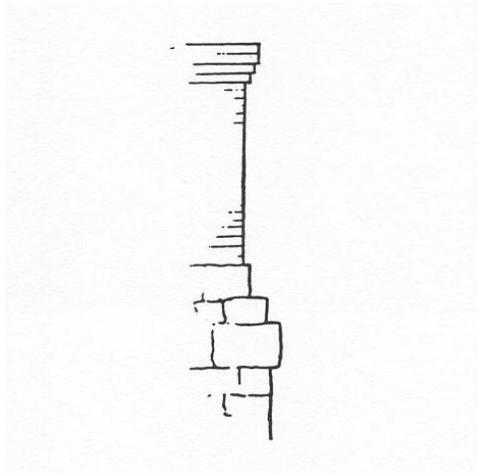


Figure 2 - Stone chimney with brick chimney stack.

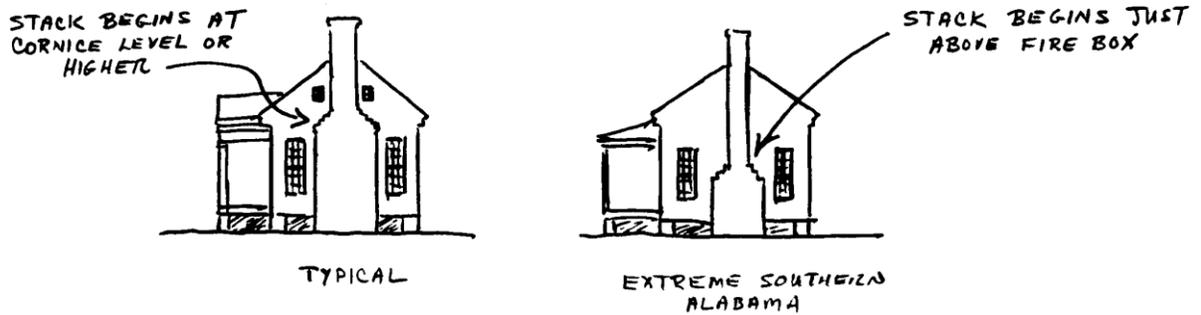


Figure 3 - Typical Alabama chimney profile, ca. 1810-1880.

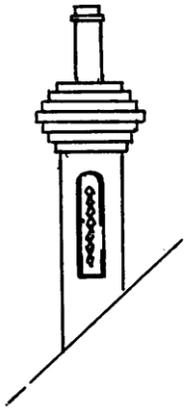


Figure 4 - Ornamental Victorian-period chimney with terra-cotta stack (late 19th - early 20th century)

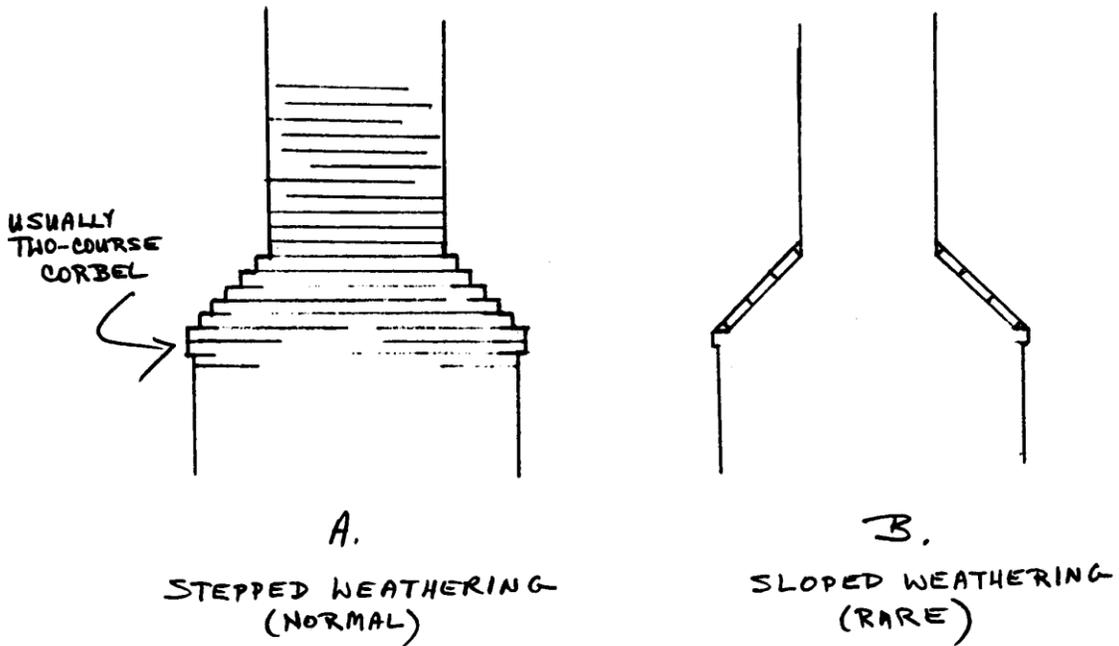


Figure 5 - Weatherings on early Alabama chimneys.

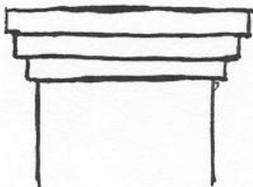
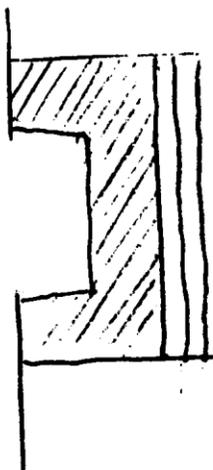
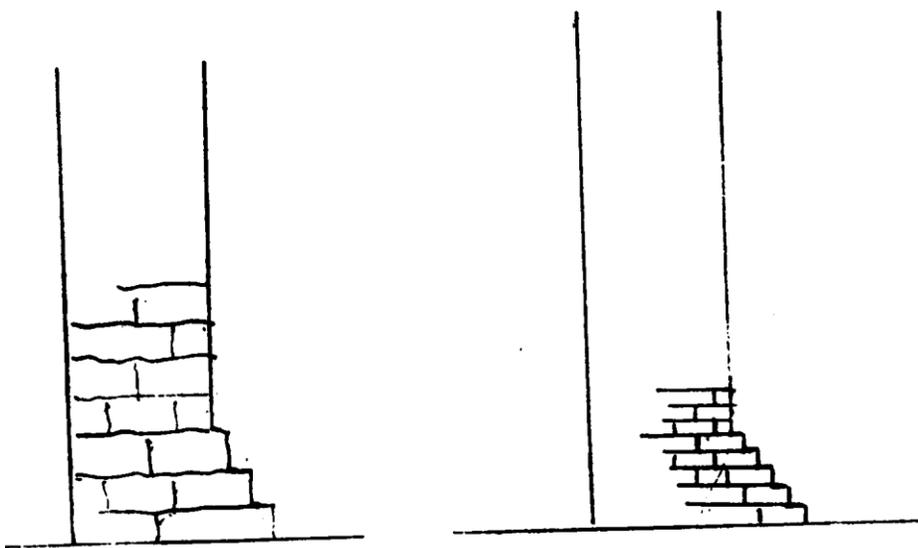
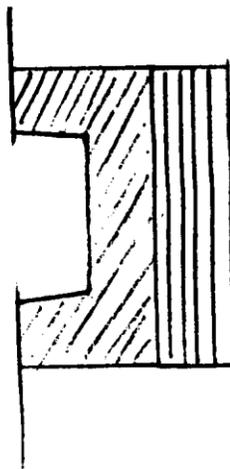


Figure 6 - Typical early to mid-19th century corbelled chimney top.



STONE



BRICK

Figure 7 - Side elevation (upper drawings) and base plan (lower drawings) for stone and brick corbelled chimney foundations.

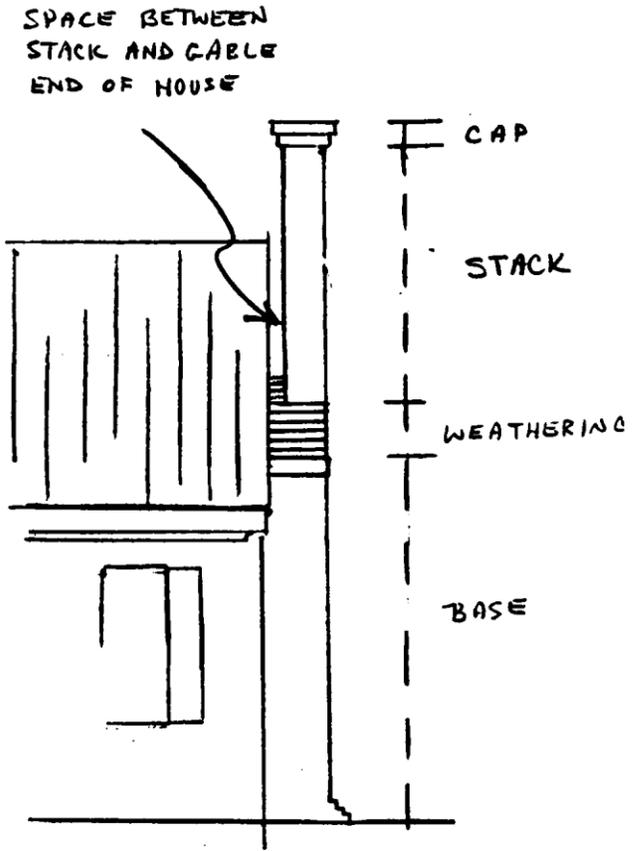


Figure 8 - Profile of typical early to mid-19th century construction showing break-away stack.



Figure 9 - Diaperwork chimney, Madison County. Note diamond pattern just beneath stepped weatherings. The chimney stack appears to have been rebuilt at a later date - perhaps when the house itself was enlarged and remodeled. Only three examples of early nineteenth century diaperwork chimneys have to date been documented in Alabama.



Figure 10 - Chimney pent at Bride's Hill (ca. 1830), Lawrence County. A similar pent abuts the right chimney on the rear side of the house. Note that the pent is cantilevered out from the main foundation.