cal iron stoves and ranges. Stoves made of iron plates were known in Medieval Europe and were introduced in the United States by Benjamin Franklin in the 18th century. These sheet-iron stoves were, however, leaky and inefficient; the widespread adoption of iron stoves and ranges did not begin until the 1830s when relatively cheap and airtight units of cast iron were introduced. These required only a metal pipe to vent smoke and fumes to the outside and led to widespread abandonment of large masonry chimneys. In modest houses the stoves were often vented only by metal pipes extended through roof or wall. More commonly, massive fireplaces were replaced with narrow masonry flues, to which the metal stovepipes were connected. These led to small chimneys and provided a safer, fireproof escape for the hot concentrated fumes of stove and range.

A second cause of the decline of external chimneys has been the widespread adoption of natural gas and electricity for heating and cooking in the 20th century. These, too, require only metal pipes for external venting and thus the once essential chimney and fireplace have become only nostalgic luxuries in most 20th-century houses.

PORCHES—In British usage the word "porch" means sheltered entranceway, either partially open or enclosed on all sides to make a small room. Porches in the American sense—that is, roofed but incompletely walled living areas—are rare in Europe, where such spaces are known by other names: verandah or piazza (Britain), galerie (France), portale (Spain), or loggia (Italy). The origin and inspiration of the far more common porch of American houses has been much debated. It was clearly adopted because of the oppressive heat and frequent thundershower deluges of the New World summers, but its exact sources remain uncertain.

Porches are normally constructed in either of two ways: one or more external walls can be omitted under the principal house roof to give an inset porch; or, an additional roof can be added onto the principal roof to give a smaller porch roof which is relatively independent of the main roof. Both types are common in American houses. Roofs are normally supported by the external house walls; when some of these are deleted to make a porch, columns or other roof-supporting devices are required. In addition, when porches occur much above ground level, a railing or low wall, usually with an open framework to admit breezes, is required for safety. These supporting members and enclosures can be of wood, masonry, or metal and provide rich opportunities for decorative embellishment of the house facade.

Even in colonial times, porches were becoming common in the New World: both French and English colonists in the warmer, southern colonies commonly added verandahs or galeries to their houses. The use of large porches expanded until, by the late 19th and early 20th centuries, they had become an almost universal, and quite distinctive, feature of American domestic architecture. These showed an enormous variety of size, shape, and placement; many houses had several porches, or extended porches covering several walls. By the mid-20th century, this trend was completely reversed. Changing fashions—and the development of air-conditioning for summer cooling—have all but eliminated this once dominant feature of the American house facade.

DECORATIVE DETAILS—Architectural details such as windows, doors, chimneys, and porches all serve important practical functions. One other category of detail has no such obvious use but is, instead, added principally to enhance the beauty of the house exterior. Such decorative details are of two main types: in the first, the principal coverings of the house

exterior—the wall cladding or roofing—are decoratively elaborated. Shaped shingles or patterned masonry are examples of this kind of decorative detail. Still more common is the second type of decorative elaboration, in which neither the roof nor walls but rather some smaller functional detail is elaborated with decorative trim. Door and window openings are commonly embellished in this way; door surrounds are particularly favored since they are closely observed by all who enter the house. Indeed, certain eras of American house building are largely characterized by their distinctive elaborated door surrounds. Windows are commonly embellished by decorative surrounds or crowns, by shaped window openings, or, most commonly, by differing shapes and sizes of glass panes. Roof-wall junctions are another favored site for the addition of decorative detail: elaborate moldings or trim, commonly matched to those of doors and windows, are frequently added beneath eaves and rakes. Chimneys, too, provide decorative opportunities; decorative shapes and patterns in brick, stone, or stucco are common. Finally, as noted above, porches provide a wealth of decorative opportunity; roof-support columns and protective balustrades have been elaborated in a nearly endless variety of decorative patterns.

