

CITY SEARCH *Charleston*



HANDBOOK

CITY SEARCH *Charleston*

AN INTRODUCTION TO STUDYING LOCAL HISTORY THROUGH ARCHITECTURE

Written and compiled by Meggett B. Lavin
Curator of Education & Research
Drayton Hall, Charleston, South Carolina

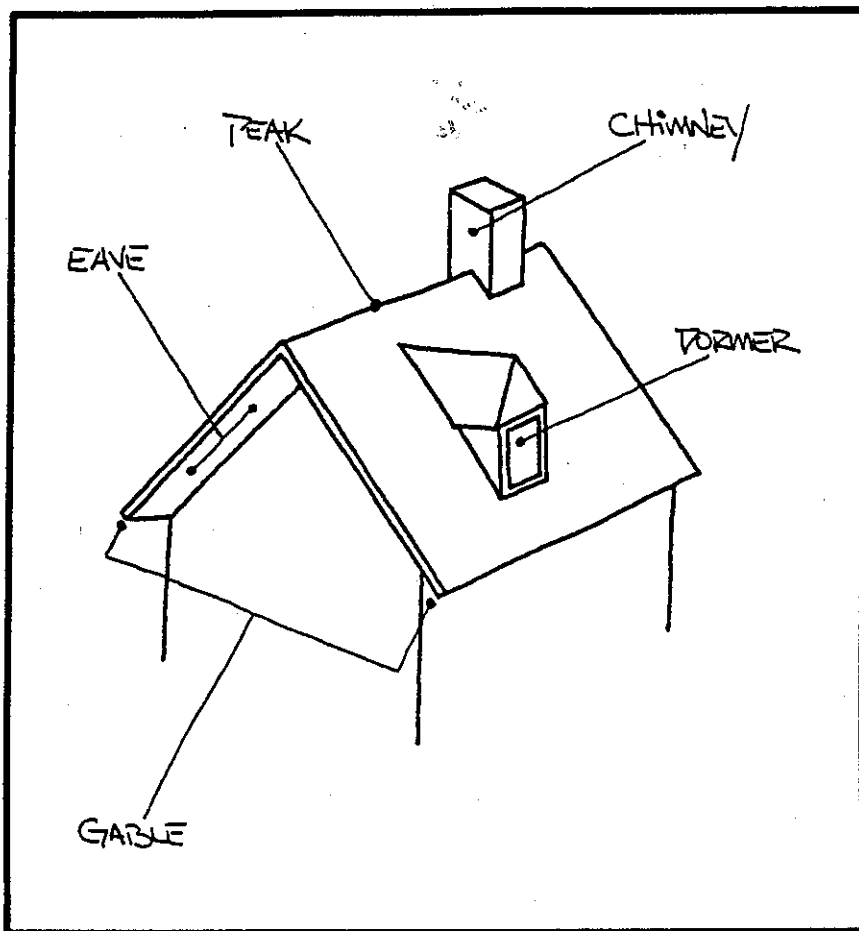
Illustrations by Linwood R. King, III
With additional drawings by Stephen A. Smith, A.I.A.
and Ricardo J. Viera

Special appreciation to Jonathan Poston
Robert Stockton
Lisa Lord
Debbie Fetner

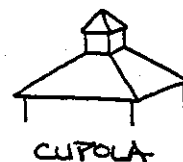
A cooperative education program of the Historic Charleston Foundation
and the National Trust for Historic Preservation at Drayton Hall.

Copyright 1988, Historic Charleston Foundation and National Trust for Historic Preservation in the United States.

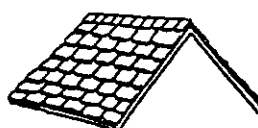
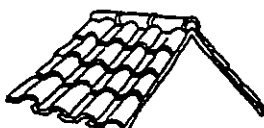
BASIC PARTS OF A ROOF



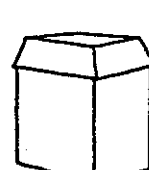
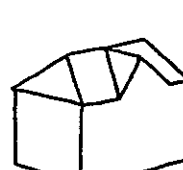
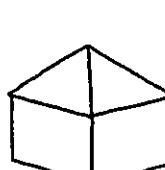
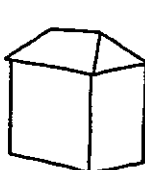
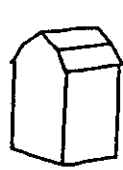
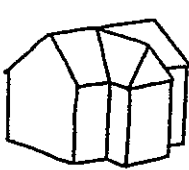
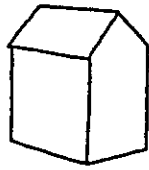
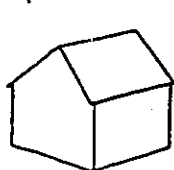
TOWER ELEMENTS:



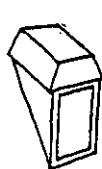
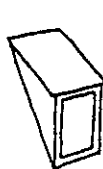
ROOFING MATERIALS:



ROOF SHAPES:

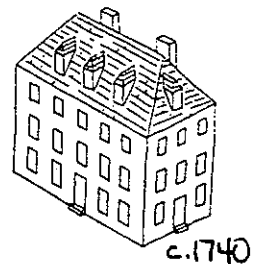
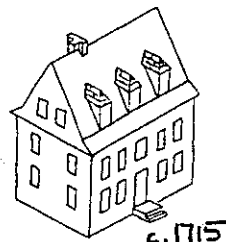
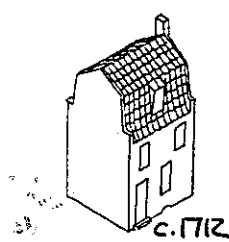


DORMER SHAPES:

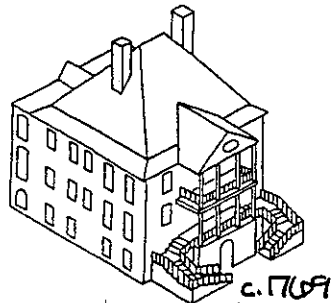


CHARLESTON TIMELINE

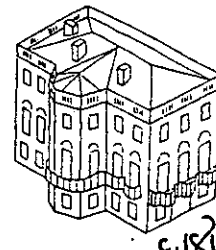
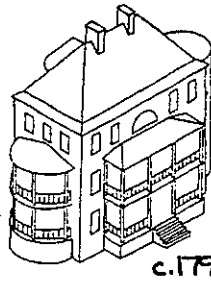
ROOFS



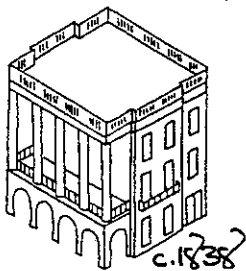
COLONIAL
(1690 - 1740)



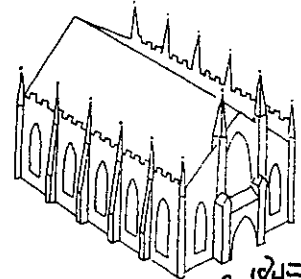
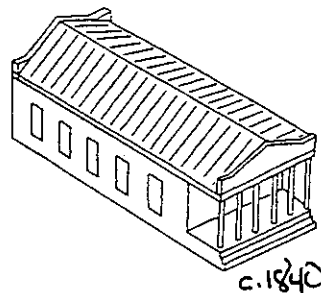
GEORGIAN
(1700 - 1790)



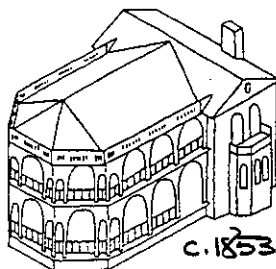
FEDERAL
(1790 - 1820)



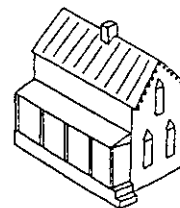
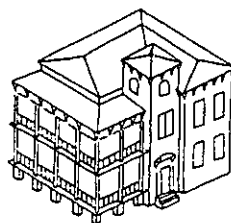
CLASSICAL REVIVAL
(1820 - 1875)



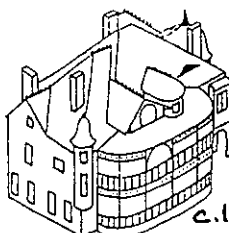
GOthic REVIVAL
(1830 - 1900)



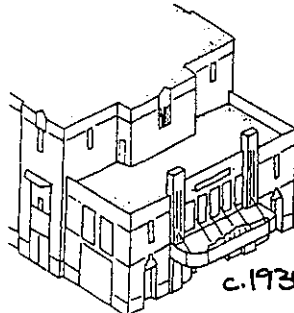
ITALIANATE
(1850 - 1875)



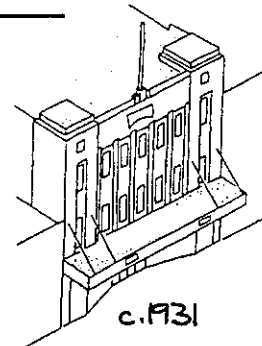
"CARPENTER GOthic"



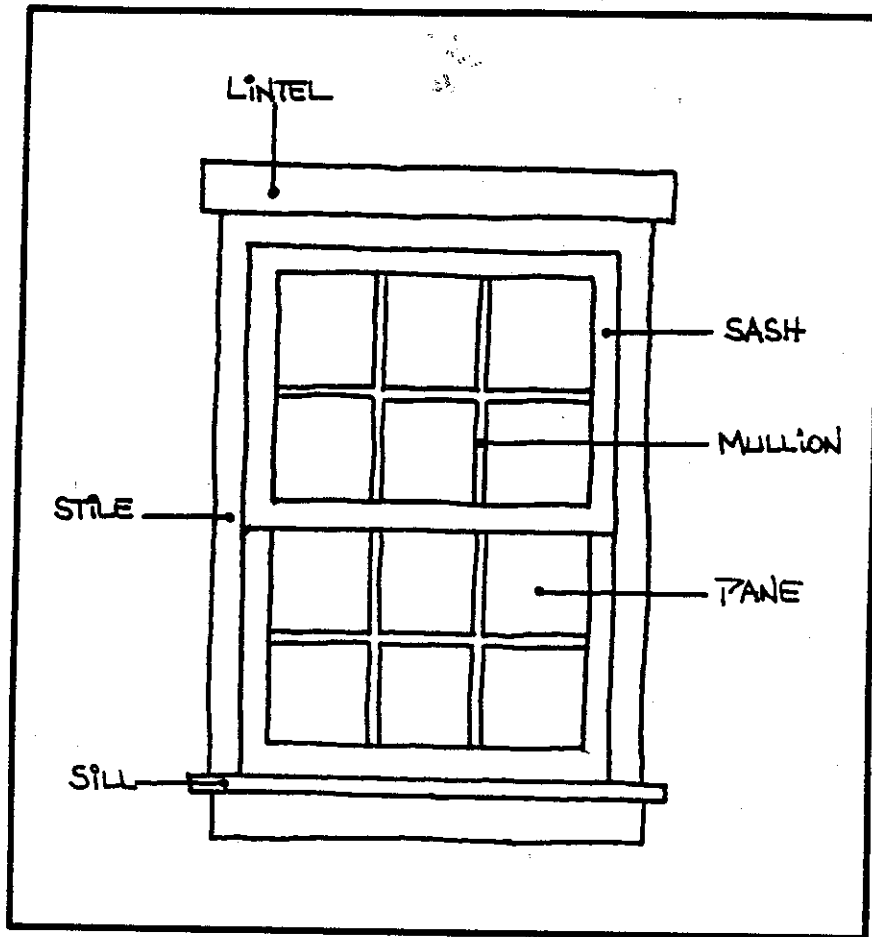
"QUEEN ANNE"
VICTORIAN
(1860 - 1910)



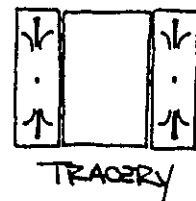
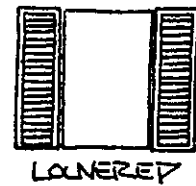
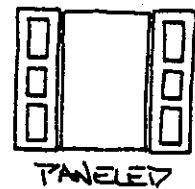
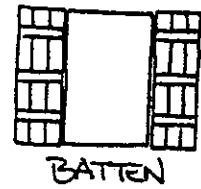
ART DECO
(1920 - 1940)



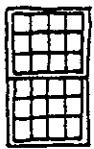
BASIC PARTS OF A WINDOW



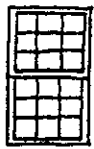
SHUTTERS:



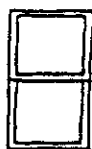
SASH ARRANGEMENT:



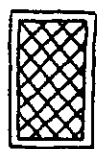
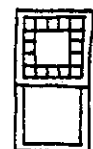
EARLY 1700's



MID 1700's TO
EARLY 1800's

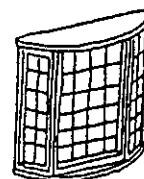
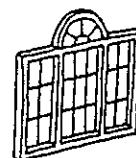
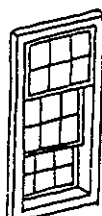
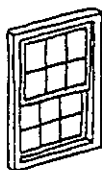
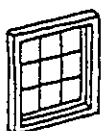


MID 1800's TO EARLY 1900's

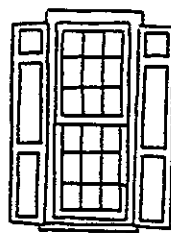
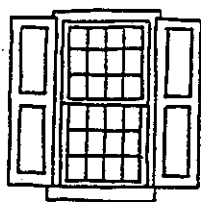


VICTORIAN (1860-1910)

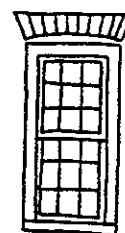
SASH TYPES:



CHARLESTON TIMELINE WINDOWS

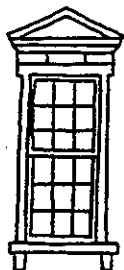


c. 1715

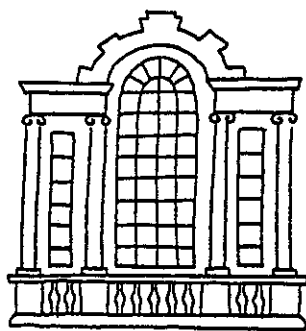


c. 1760

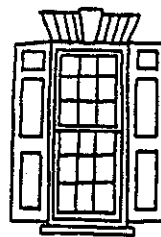
COLONIAL
(1690 - 1740)



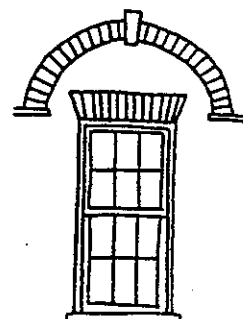
c. 1768



c. 1771



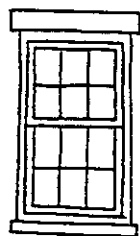
c. 1800



c. 1800

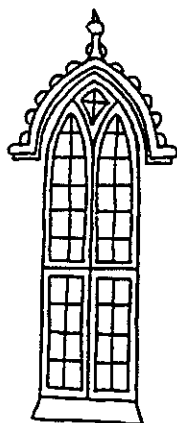
GEORGIAN
(1700 - 1790)

FEDERAL
(1790 - 1820)



c. 1830

CLASSICAL
REVIVAL
(1820 - 1875)

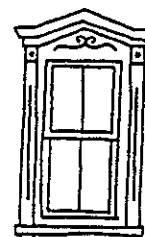
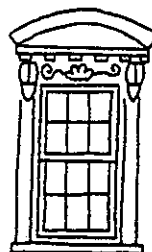


c. 1845

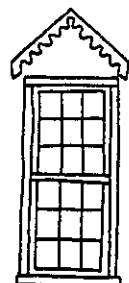
GOthic
REVIVAL
(1830 - 1900)



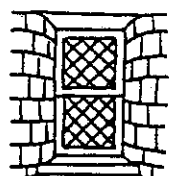
c. 1853



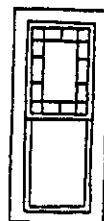
ITALIANATE
(1850 - 1885)



"CARPENTER GOTHIC"



"SHINGLE"
VICTORIAN
(1860 - 1910)

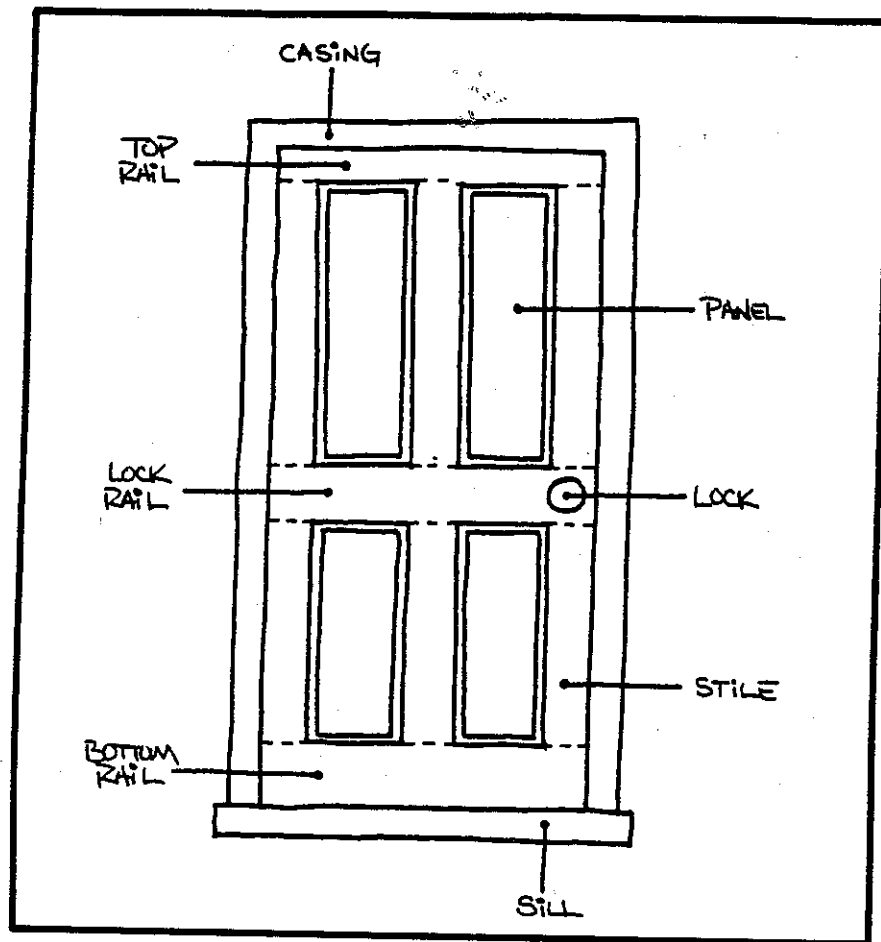


"QUEEN ANNE"

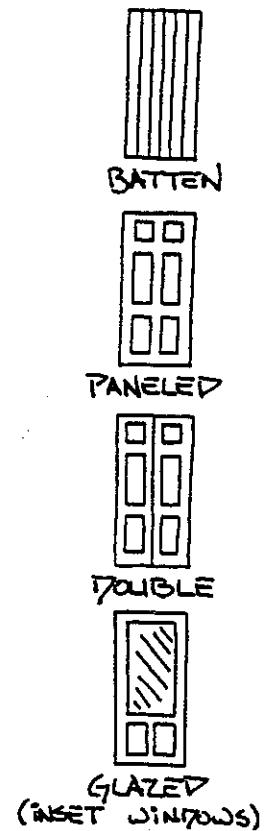


c. 1939
ART DECO
(1920 - 1940)

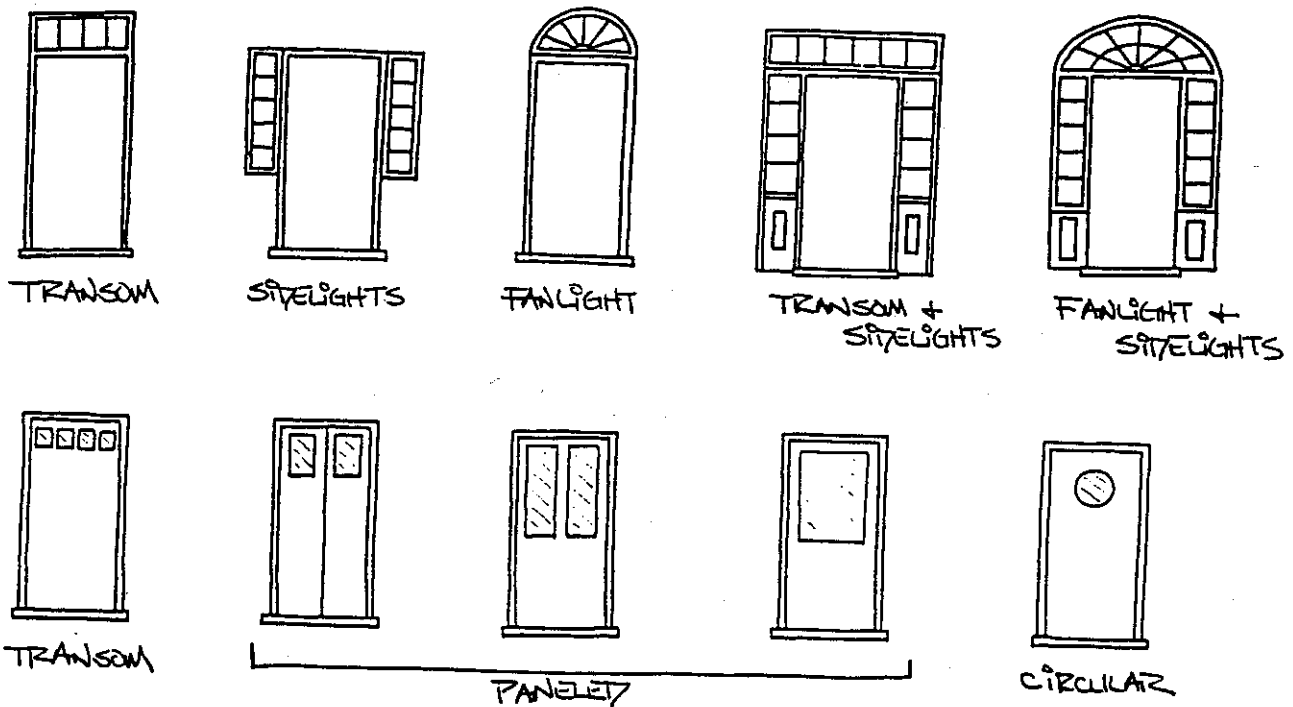
BASIC PARTS OF A DOOR



DOOR TYPES:



DOOR WINDOWS AROUND DOOR:

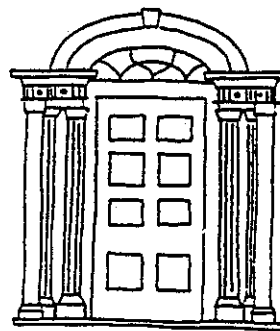


CHARLESTON TIMELINE

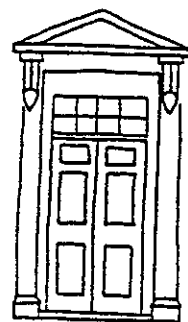
DOORS



COLONIAL
(1690-1740)

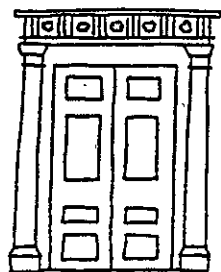


c.1709

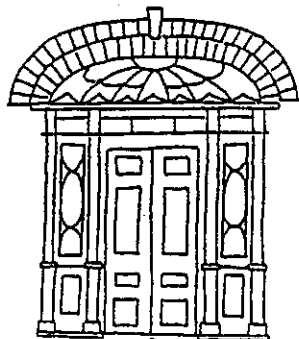


c.1772

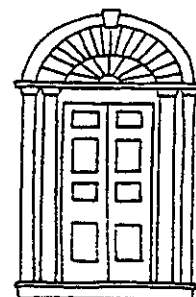
GEORGIAN
(1700-1790)



c.1797

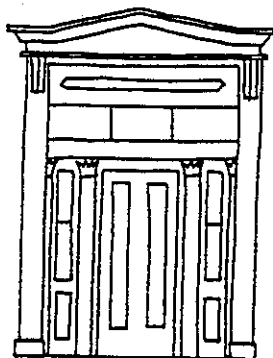


c.1800

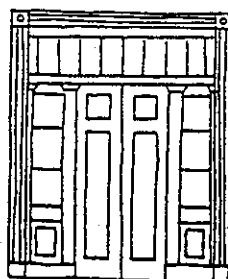


c.1811

FEDERAL
(1790-1820)

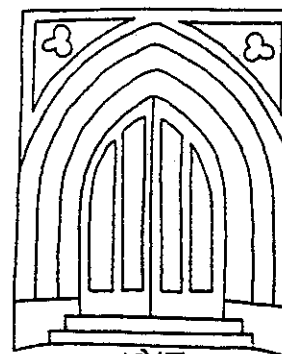


c.1840



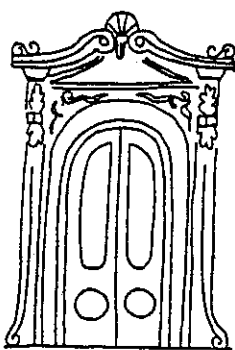
c.1844

CLASSICAL REVIVAL
(1820-1875)

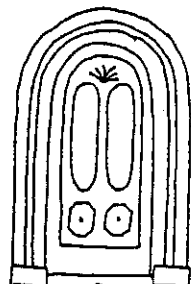


c.1845

GOthic REVIVAL
(1830-1900)

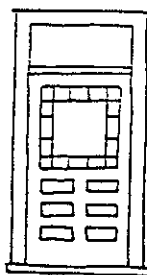


c.1850



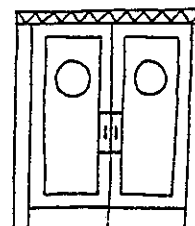
c.1853

ITALIANATE
(1850-1885)



c.1891

VICTORIAN
"QUEEN ANNE"



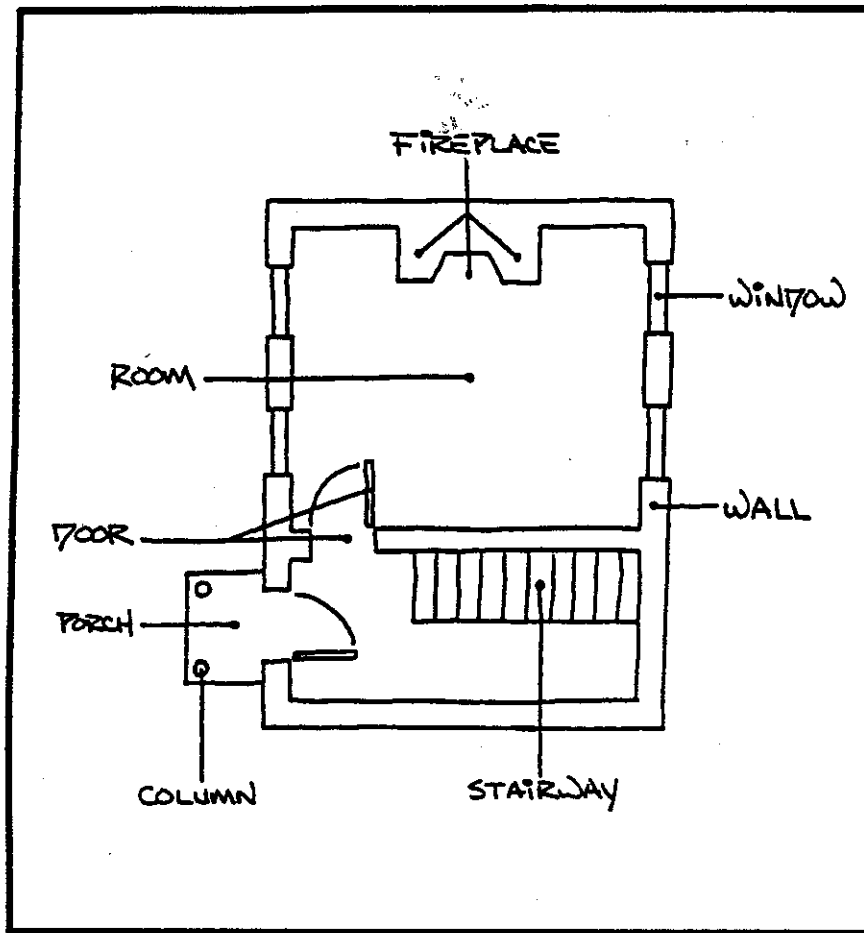
1939



1939

ART DECO
(1920-1940)

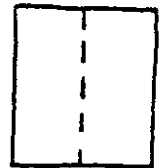
BASIC PARTS OF A PLAN



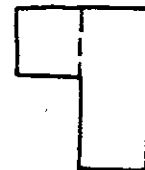
TYPES OF PLANS:



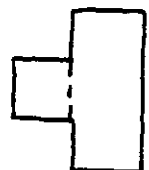
SINGLE



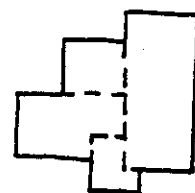
DOUBLE



L-SHAPE

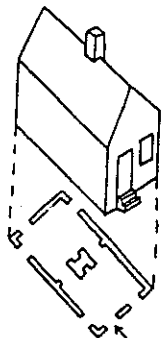


T-SHAPE

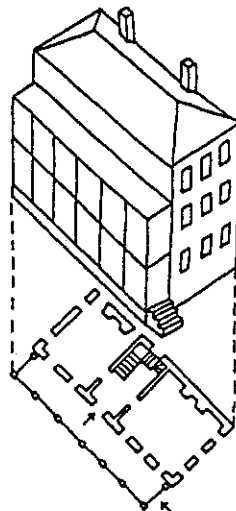


IRREGULAR

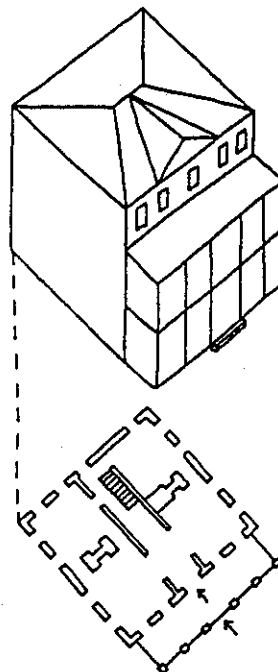
CHARLESTON HOUSE / PLAN TYPES:



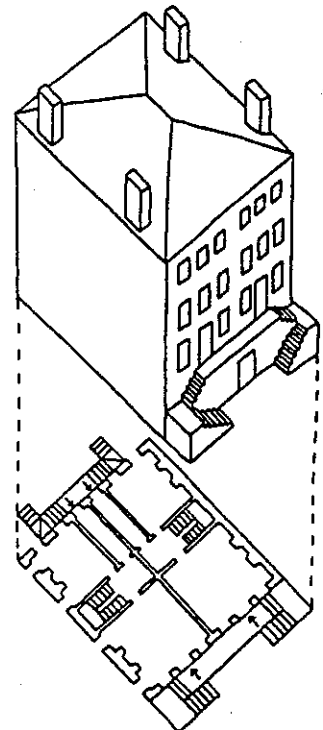
FREEDMAN'S



SINGLE



DOUBLE

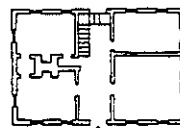


TENAMENT

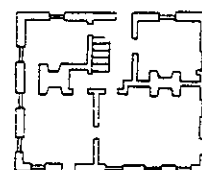
CHARLESTON TIMELINE PLANS



c. 1712



c. 1715

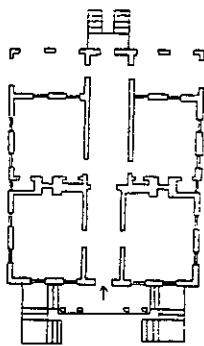


c. 1728

COLONIAL
(1690 - 1740)

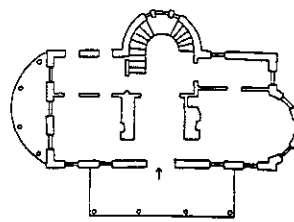


c. 1740

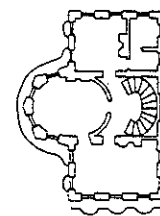


c. 1769

GEORGIAN
(1700 - 1790)

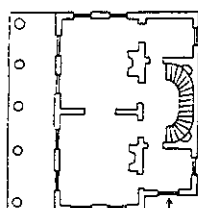


c. 1790

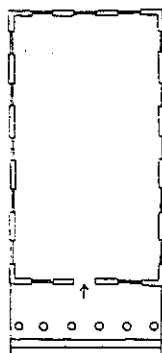


c. 1811

FEDERAL
(1790 - 1820)



c. 1838



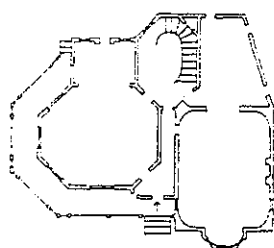
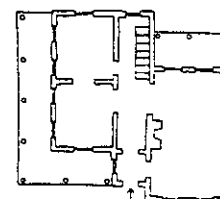
c. 1840

CLASSICAL REVIVAL
(1820 - 1875)



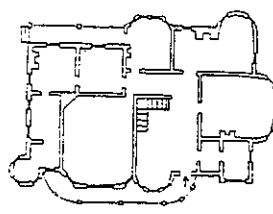
c. 1845

GOthic REVIVAL
(1830 - 1900)



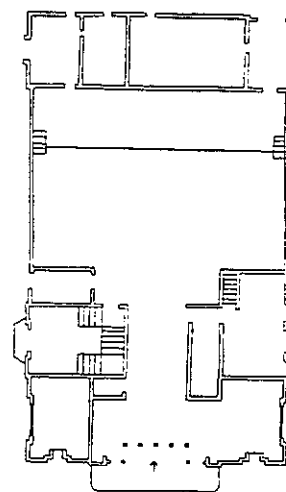
c. 1853

ITALIANATE
(1850 - 1855)



c. 1891

VICTORIAN
"QUEEN ANNE"



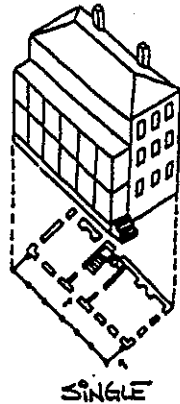
1939

ART DECO
(1920 - 1940)

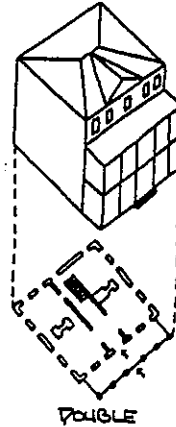
BUILDING TYPES

CHARLESTON BUILDING TYPES

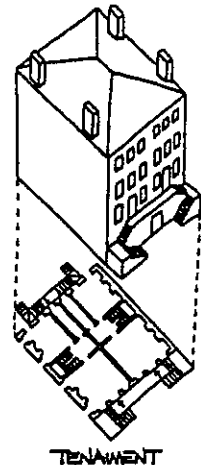
CHARLESTON SINGLE HOUSES are one room wide on the street side. The entrance is on the side, and goes into a central hall. Single houses can have a series of rooms in a row and be as high as three or four stories. Most single houses have a side porch, or piazza, which helps catch the breeze. The piazza usually has a door on the street as the first entrance, with a wall for privacy. Chimneys are typically found on the back side wall.



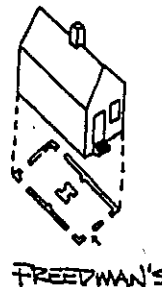
DOUBLE HOUSES most often have their front door facing the street, but not always. The entrance goes into a central hall with two rooms on either side. Chimneys are usually found on the interior walls.



TENEMENT is the old term for a building that is two or three houses joined together, side-by-side. Tenements are usually several stories high and are designed to look like one building.

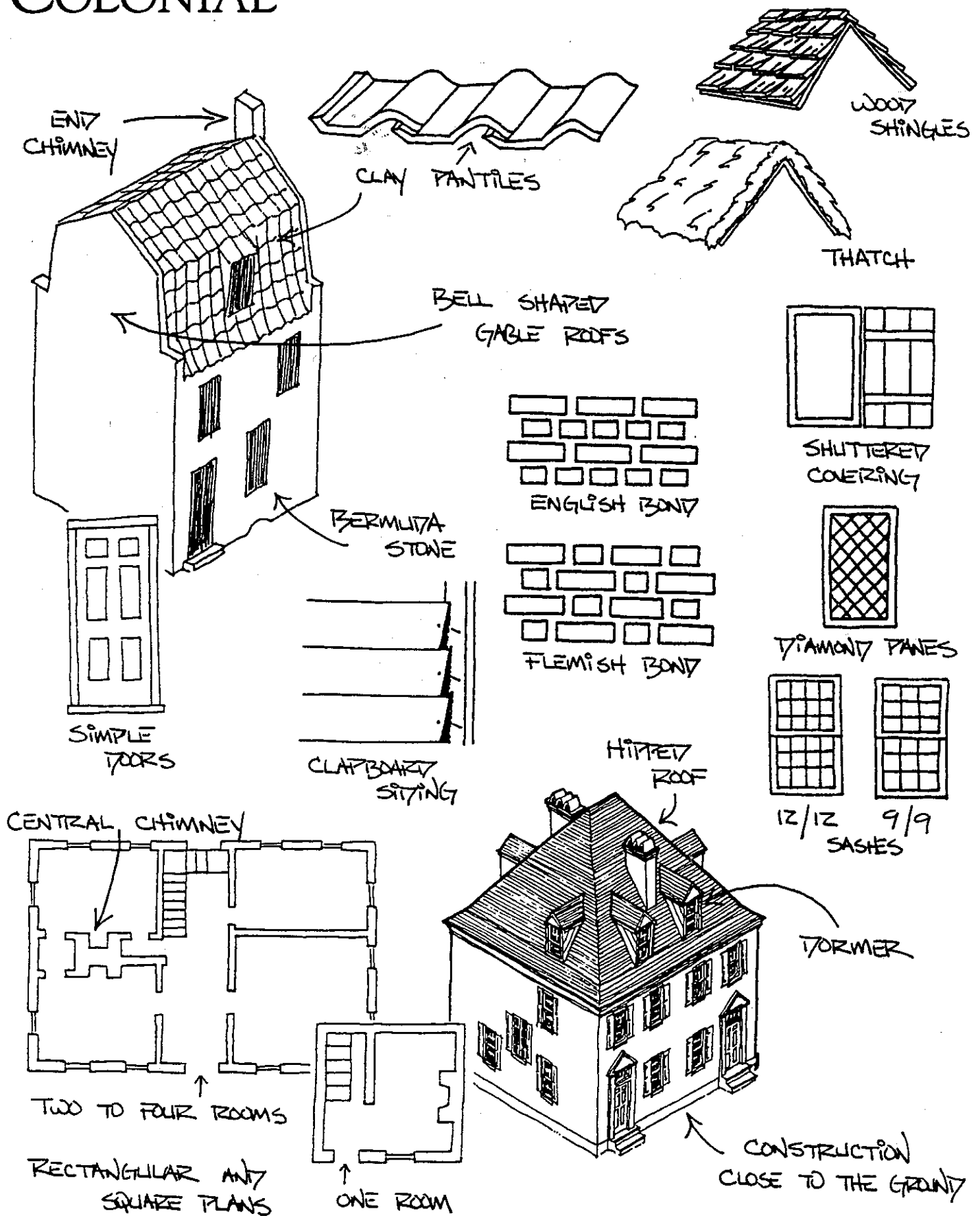


FREEDMAN'S COTTAGES are one room wide, one story tall, and have a side porch. They usually have a chimney in the center dividing the room in two. If they are very small, then the chimney is on the side.



ALL OF THE ABOVE FORMS CAN BE FOUND IN A VARIETY OF STYLES.

COLONIAL



CITY SEARCH: EARLY COLONIAL ARCHITECTURE (1690-1740)

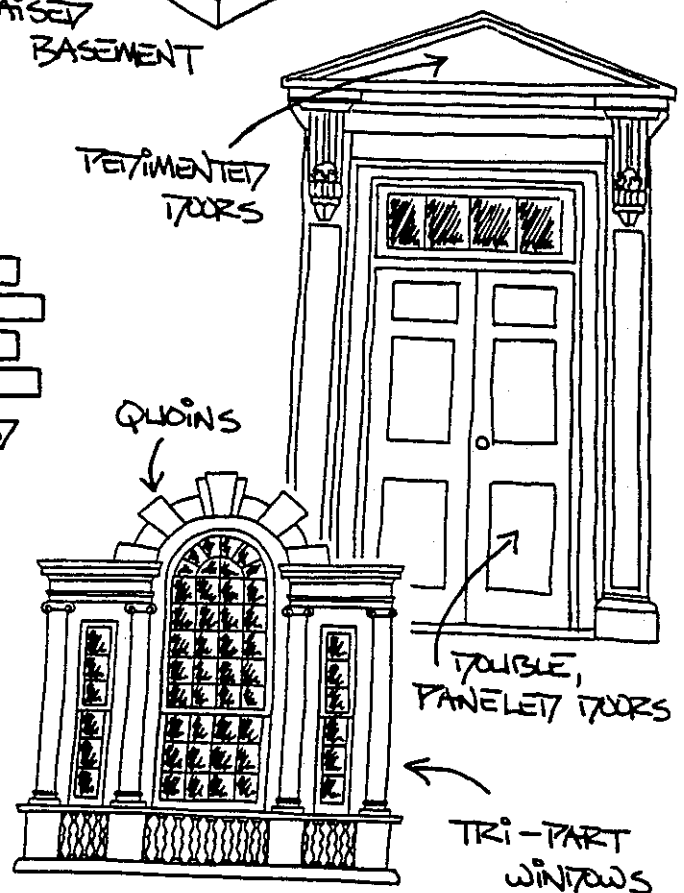
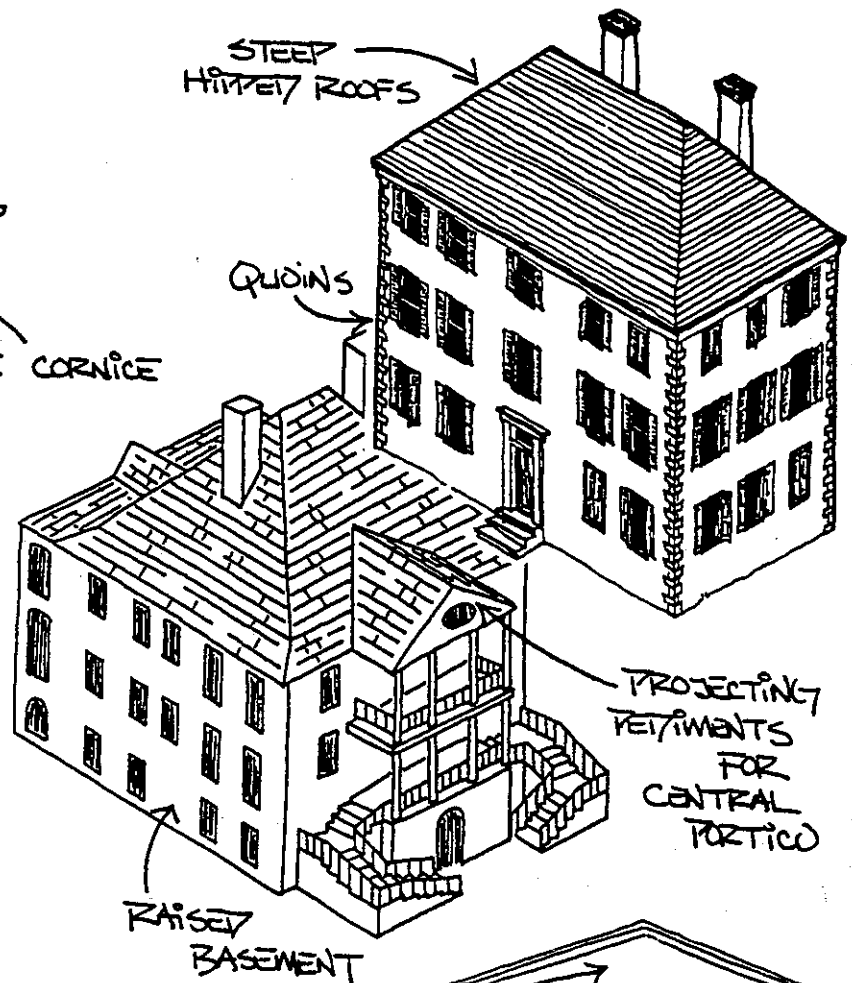
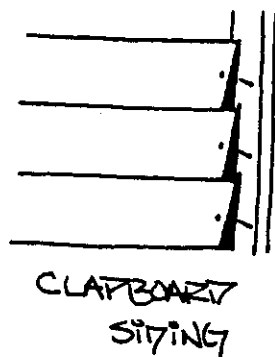
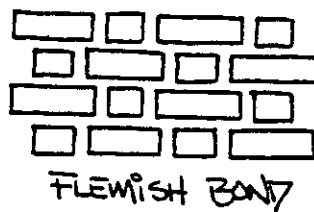
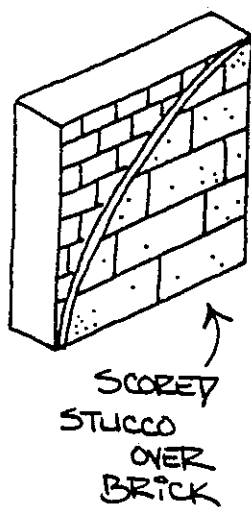
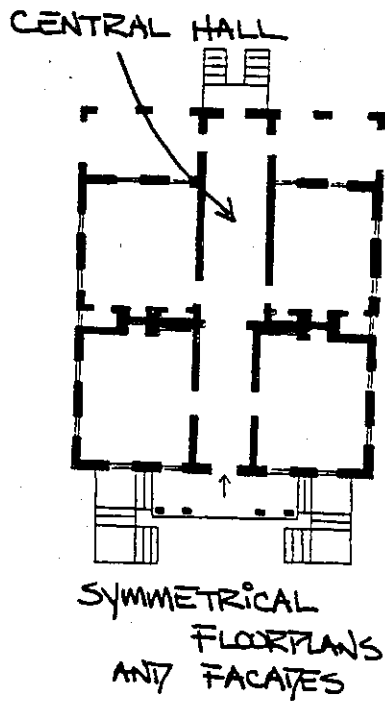
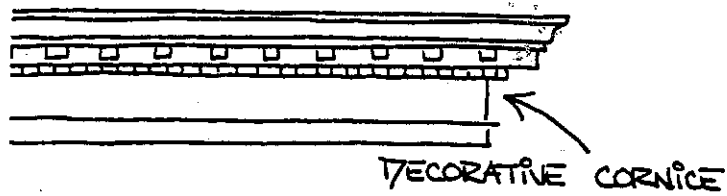
After relocating the settlement of Charles Towne to Oyster Point in 1680, the early colonists built small sturdy houses "close to the ground" that were usually one to two and a half stories tall. They were constructed using English building methods and local materials such as wood, brick, and tabby. The building designs ranged from typical English cottages and town houses to a combination of English and Dutch styles. At least three sides of the city were protected by brick fortifications with bastions and gates until the early 1700's. Some settlers built outside the city walls.

Though the colonists were inventive with local wood, clay, sand, and oyster shells, they needed to import iron hardware, window glass, lead, and Dutch clay tiles. Local bricks were widely used, though they were also available from England at great expense.

The floor plan of early colonial buildings would vary from one rectangular room with a chimney on the end, to a set of two or four rooms around central

fireplaces. They were characterized by a square or rectangular shape that faced the street. Very early buildings were made using "half timbered" walls. This type of construction was done by filling wood beam framing with tabby or brick. Later homes were wood frame with clapboard siding, or brick walls patterned in English or Flemish bond. Windows could be as simple as a shutter covering an open space, or as decorative as diamond shaped panes trimmed with lead. Later in the period, windows changed to sets of twelve over twelve, or nine over nine panes of glass in sliding sashes. Roofs were either hipped or gabled, and may had dormers. Some roofs reflected Dutch design through rolled gables and bell shapes with flared eaves. The roofing materials available included wood shingles, tiles, thatch, and imported slate. Chimneys could be made of brick, or wood covered with clay. Early drawings of the city show balconies instead of porches, with many houses being a place of business on the first floor and a residence above.

GEORGIAN



CITY SEARCH: GEORGIAN ARCHITECTURE (1700-1790'S)

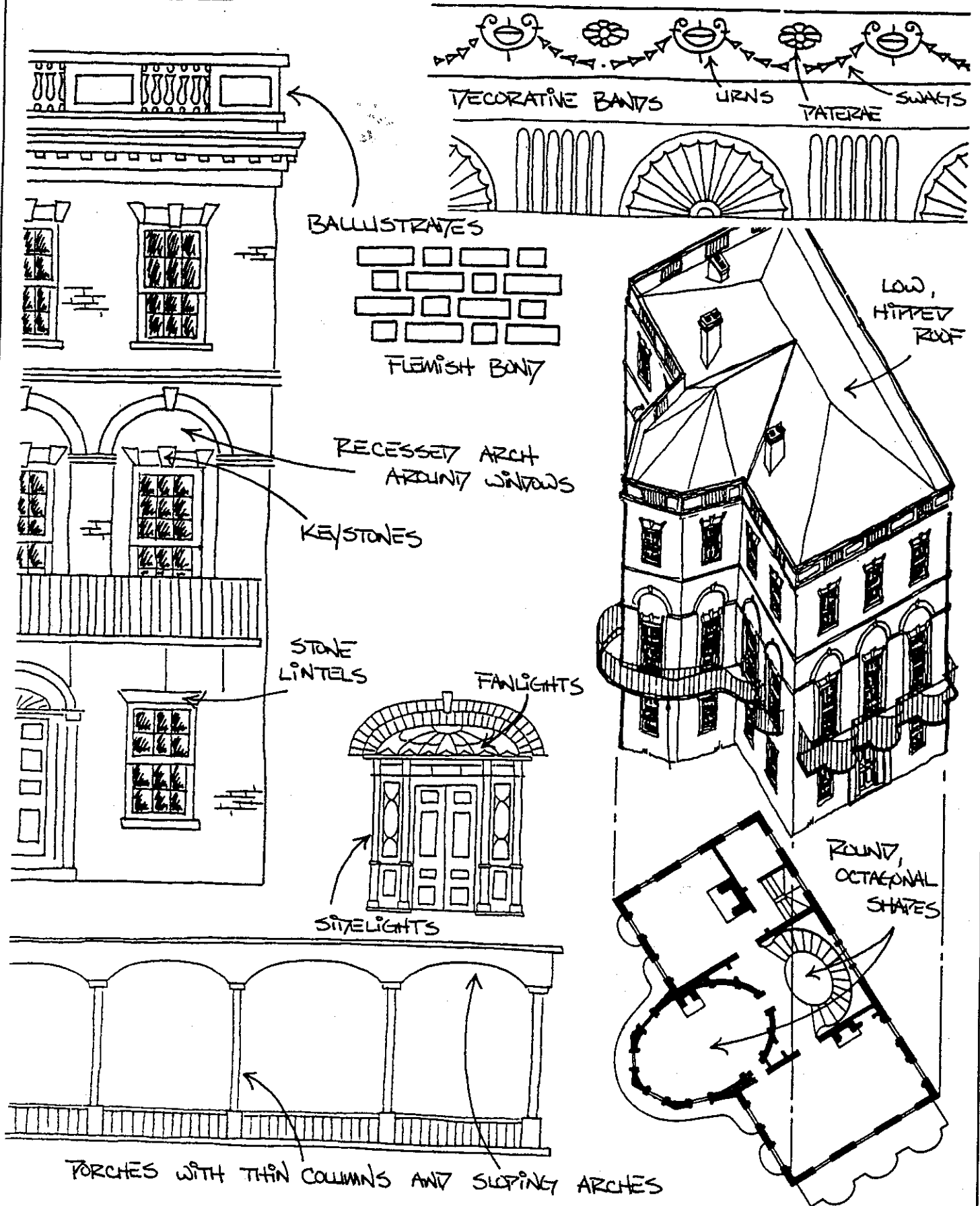
It was common for owners of early colonial buildings to update them with Georgian designs. Georgian refers to the English building style popular during the reign of the four King Georges from 1714-1830, though in this country the period ends around the time of the Revolutionary War. From modest to most elaborate, Georgian buildings share a distinctive style that can be easily recognized from the exterior. The basic design is a rectangular block with symmetrical placement of box chimneys, sash windows, paneled doors, and classical (Greek and Roman) details.

The early floor plans of Georgian houses (found until 1750) were often asymmetrical in Charleston, though it was most common during the period to have a symmetrical central hall plan. With the central hall plan there were sets of rooms on either side grouped around a fireplace. Outside walls were constructed in Flemish bond brick, or clapboard hand cut from local trees. Brick details included Jack arches, belt courses, quoins, and water tables, depending on the grandness of the house. Stucco was also used over brick to simulate stone. Unlike today's windows, Georgian sashes had twelve over twelve, or nine over nine panes of glass.

Doors were either one large paneled section, or side-by-side paneled sections that opened in the center. Decorative door trim included Doric, Ionic, or Corinthian pilasters, swans neck pediments, or transoms. Roofs were usually steeply pitched and hipped, with either clay tiles, wood shingles, or slate for covering. Many roofs had dormers, and it was common to have a decorative cornice under the eaves.

In the 1730's, builders began to mix the Italian designs of Andrea Palladio with Georgian architecture. Palladio was a re-discovered 16th century architect whose building ideas came from looking at classical temples and ruins. Palladian elements included: a one story raised basement with rustic detail (stone quoins, plain windows, heavy board shutters); projecting gables from the roof that served as pediments over a portico (centralized porch or main entrance); tri-part windows; Doric, Ionic, Corinthian columns; arches; other Greek and Roman moldings, and symmetrical out buildings flanking the main structure. While most Georgian buildings maintain simple, classical lines, very elaborate private homes and public buildings combined Georgian and Palladian features.

FEDERAL

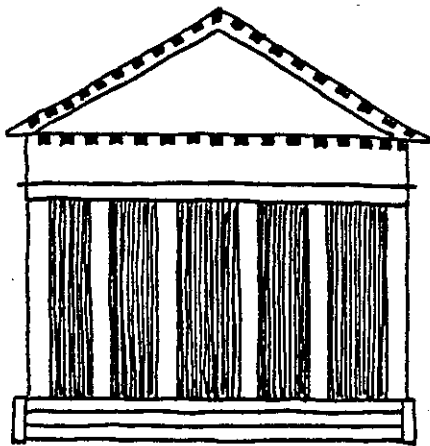


CITY SEARCH: FEDERAL ARCHITECTURE (1780-1830)

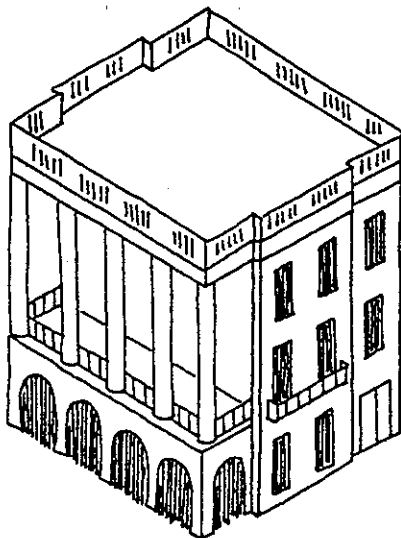
Federal style buildings take their name from the political period in America when they were built. Not long ago, buildings of this period were known as "Adam style" or "Adamesque" because they imitated the designs created by the Adam brothers in Scotland in the 18th century. Like Georgian architecture, "Adam style" used ideas from classical architecture, but instead of being bold and geometric, its elements were slender and delicate. Adam or Federal house plans added round or octagonal sections to the main block, forming oval, circular, and octagonal rooms inside. Exterior walls were traditionally Flemish bond brick, though wood frame and clapboard were also used, with the overall effect being a smooth facade. Flemish bond walls had either Jack arches, or stone lintels with keystones

over the windows. Sash windows had nine over nine, or six over six panes of glass. Some window treatments included recessed arches around the windows. Doors were usually paneled and trimmed with pilasters or side lights. The easiest Federal element to identify is a delicately ornamented, elliptical fan light over the main door. Federal house piazzas (porches) used very slender columns connected by gentle sloping arches. General decorative details of the period included: anthemion (Greek honeysuckle), rinceaux, urns, garlands, paterae, medallions, and sheaves of wheat. Most of these details are usually found on the interior, but there are several buildings in Charleston, notably City Hall, which feature one or more of them on the exterior.

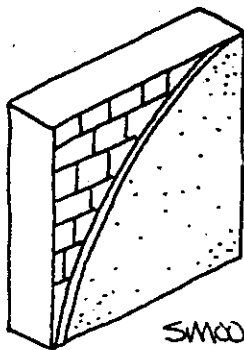
CLASSICAL REVIVAL



TEMPLE FRONT

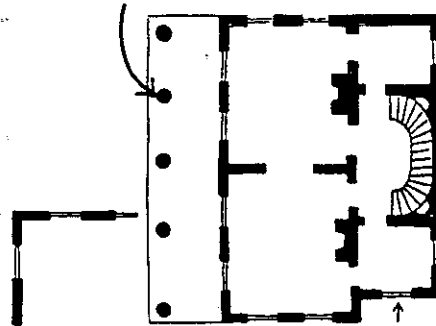


SITE PORCHES

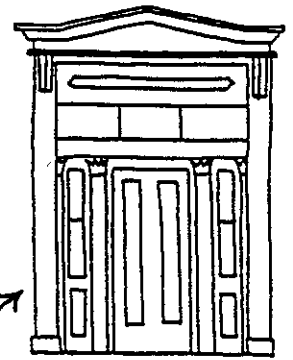
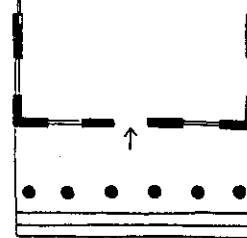


SMOOTH
STUCCO OVER
BRICK

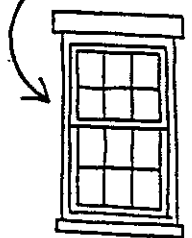
COLUMNS



RECTANGULAR PLANS
WITH COLUMNED AREAS



OPENINGS WITH
LARGE TRIM

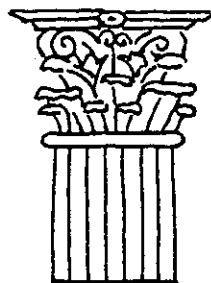


6/6 SASH

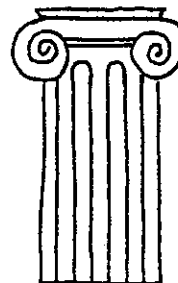
LARGE
CORNICES



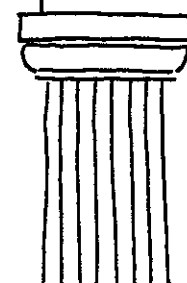
CLASSICAL
DETAILING



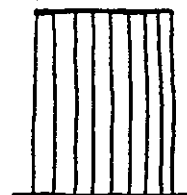
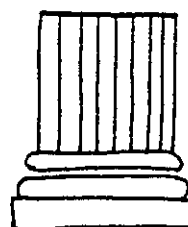
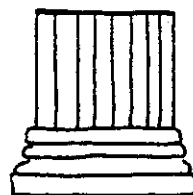
CORINTHIAN



IONIC



DORIC



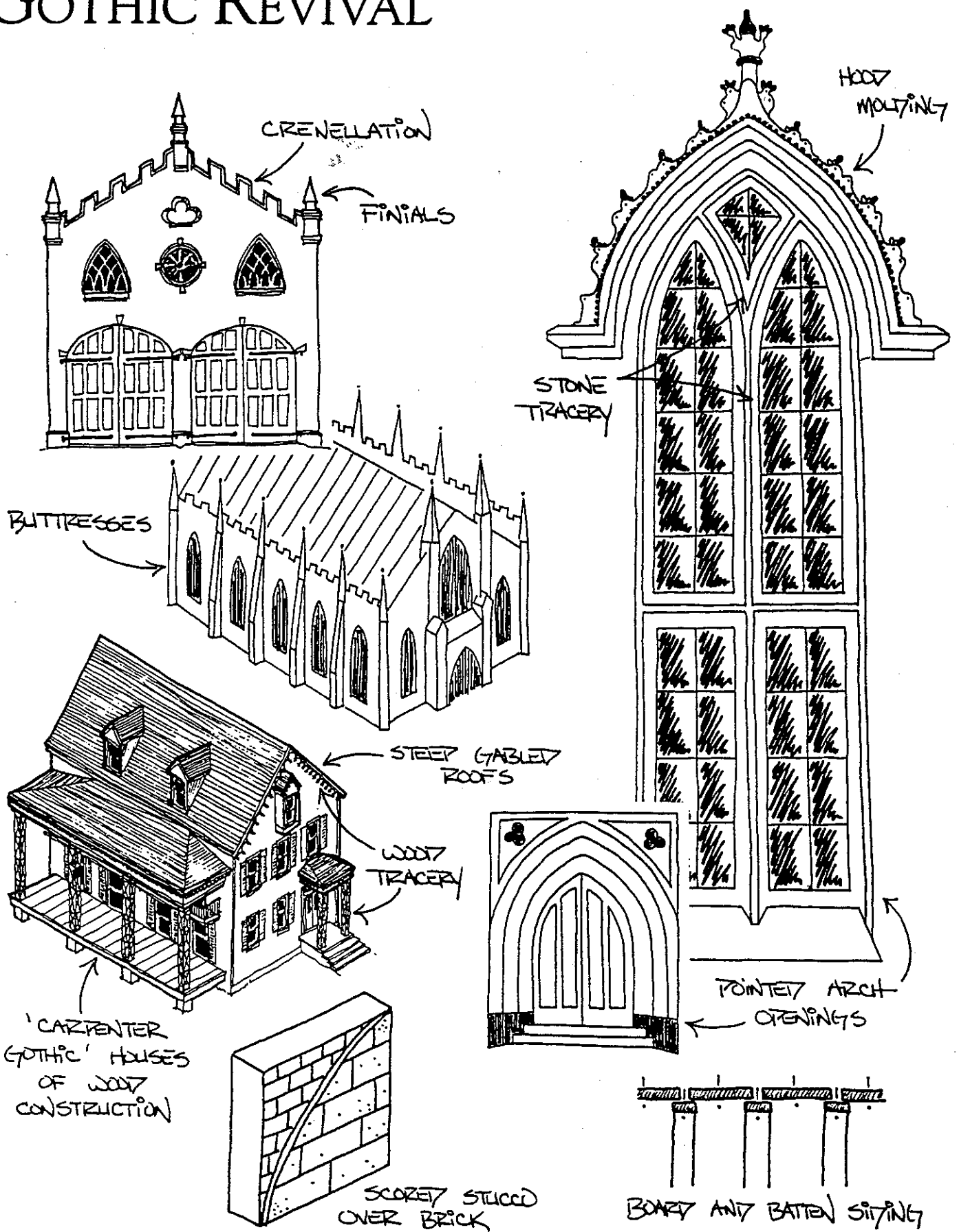
CITY SEARCH: CLASSICAL REVIVAL ARCHITECTURE (1820-1875)

The Greek Revival style was an enthusiastic response to the new democratic ideals of our young nation. Architects modeled everything from homes to churches after the ancient temples of Greece. The style was large and hearty in contrast to the delicate lines of the Federal period. Early Greek Revival buildings were constructed using strictly Greek design—no Roman arches, domes, or round rooms. The typical plan was rectangular with columns in the monumental Ionic order (from base to roof), usually in conjunction with a pediment completely across the front. This “temple front” typically masked a low pitched roof. Walls were usually smooth white stucco over brick to imitate ancient stone. Windows were generally six over six pane sashes, with tall (door size) windows on the first floor. Window trim was

large with simple molding, and may also have included a pediment above, or transom. Pilasters or sidelights on either side of the door were also common. Other decorative details included heavy anthemion (Greek honeysuckle), large cornices, and the Doric, Ionic, and Corinthian orders. Though the temple form is usually very obvious, there are some Greek Revival houses in Charleston that have only huge columns as their exterior clues.

Greek Revival was later combined with Roman and Tuscan elements such as domes, Tuscan columns, buckrane friezes, and other period details. Pure Greek Revival buildings are rare, therefore, combinations of Greek and Roman details within the same time period are called Classical Revival.

GOTHIC REVIVAL



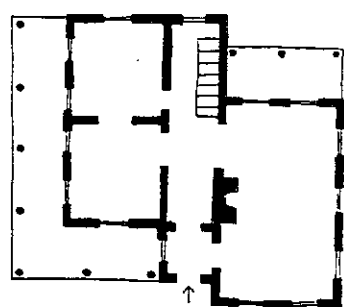
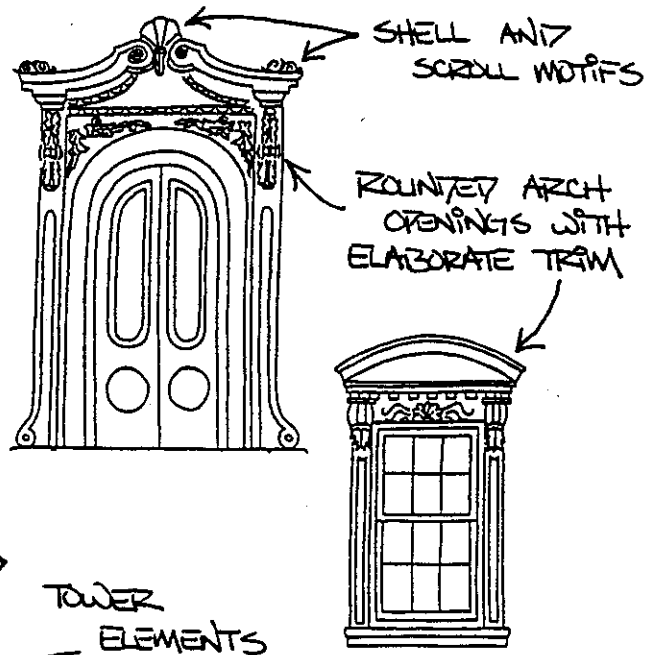
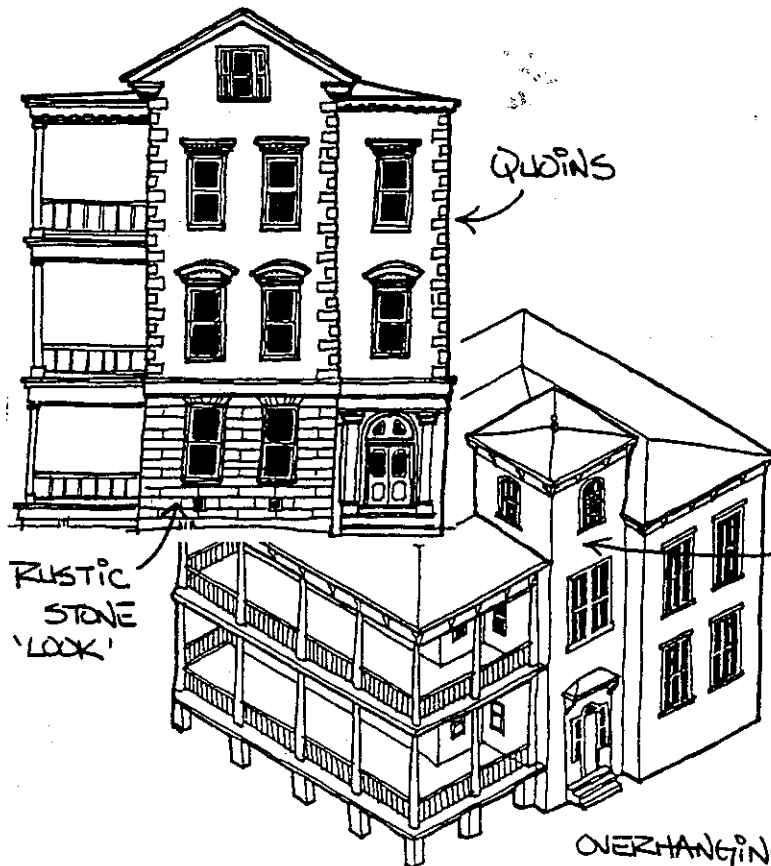
CITY SEARCH: GOTHIC REVIVAL (1830-1900)

Gothic Revival architecture was inspired by medieval castles and churches. Early buildings were made of stone with ornamentations hand cut by master craftsmen. This type of building was beyond the means of the average person, though brick covered with stucco and carved to look like stone was a good imitation. In other parts of the country, Gothic Revival cottages and houses broke away from the strict symmetrical floor plans of earlier periods and moved out to a flexible arrangement of rooms that flowed across the landscape. Gothic Revival buildings in Charleston tend to be symmetrical.

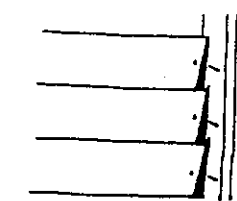
The invention of the scroll saw made it possible to imitate stone carved details in wood. Using a scroll saw, one could easily cut circular and curly-que designs. This technology made elaborate details available to everyone and launched the "Carpenter

Gothic" style, which is associated with Victorian "gingerbread". Carpenter Gothic often used vertical board and batten siding to create a smooth, unbroken facade like stone. Typical Gothic Revival windows have pointed arches, stone tracery and drip, or hood, molding. Doors may also have pointed arches and vertical panels. Roofs are steeply pitched with elaborately carved bargeboards along the gable. Other roof characteristics include tower battlements with crenelation, spires with iron or wood finials, and polygonal chimney pots. Important construction details of the period include clustered columns to provide support for pointed arches, and buttresses. (Buttresses are an extended supporting wall system that projects from the side of the building. See the Huguenot Church.)

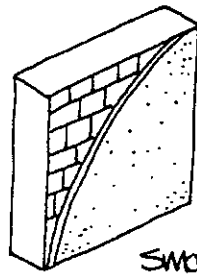
ITALIANATE



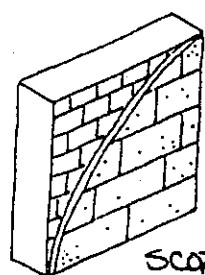
ASYMMETRICAL PLANS



CLAPBOARD SIDING



SMOOTH STUCCO

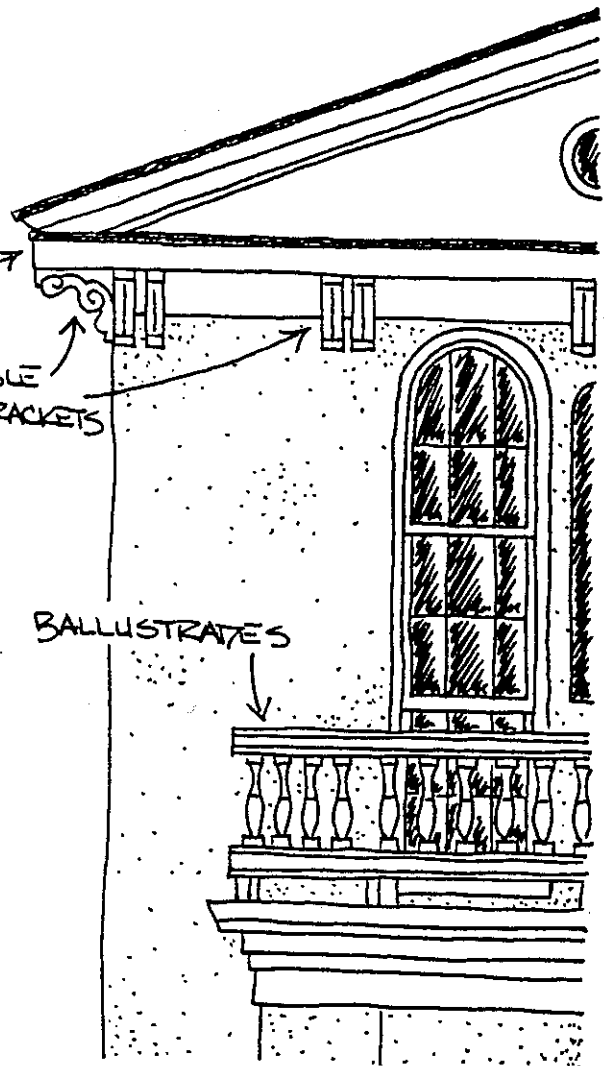


SCORED STUCCO

OVERHANGING ROOFS

TROUBLE BRACKETS

BALLUSTRADES



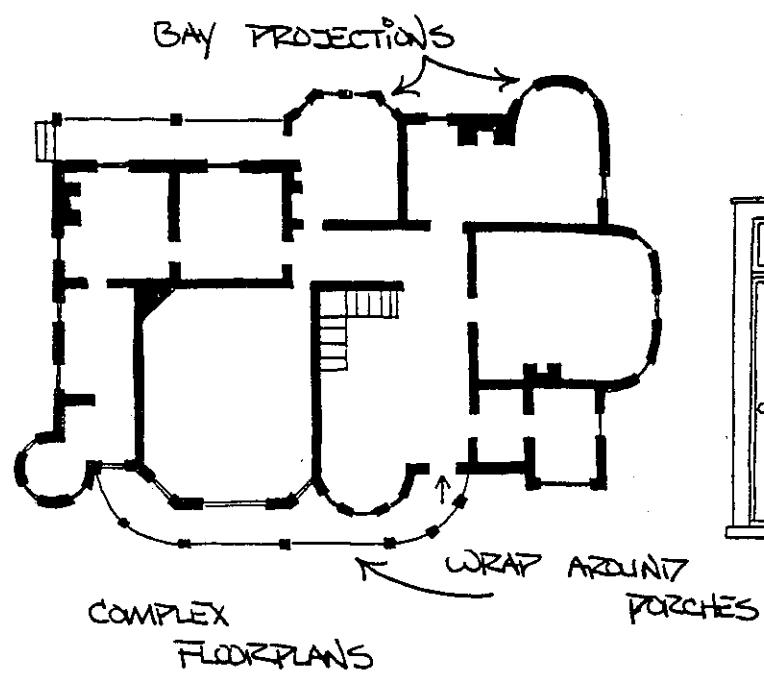
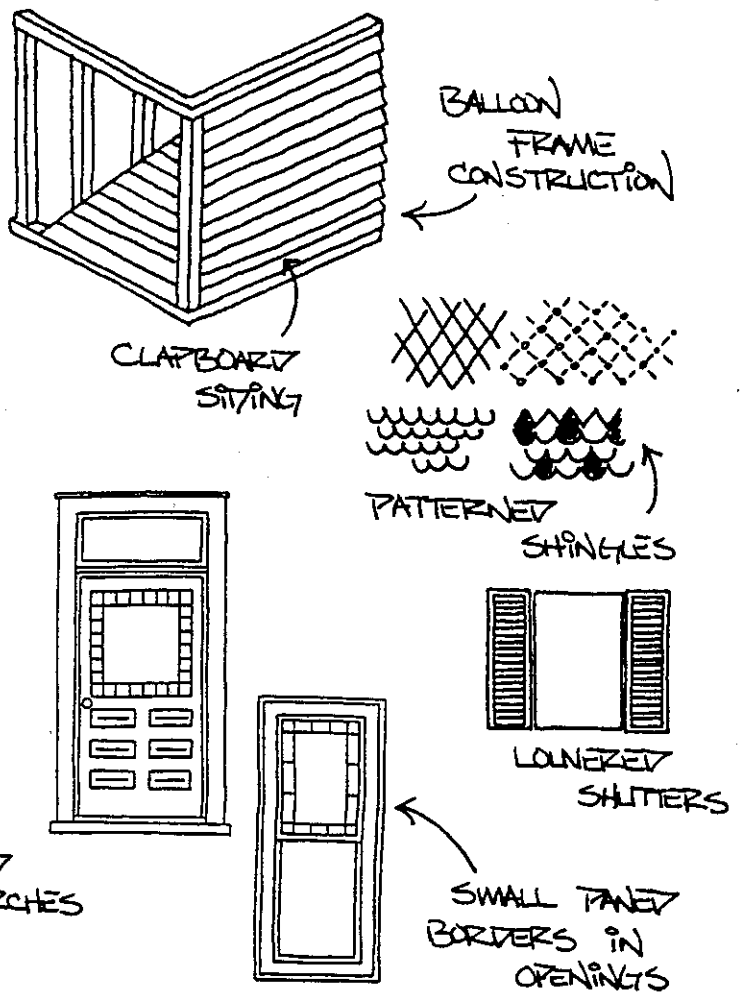
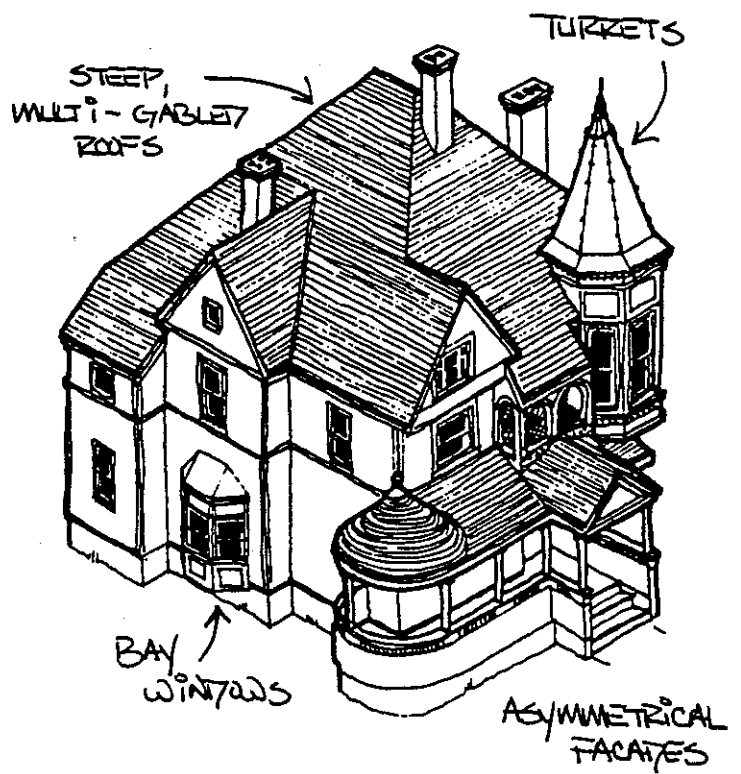
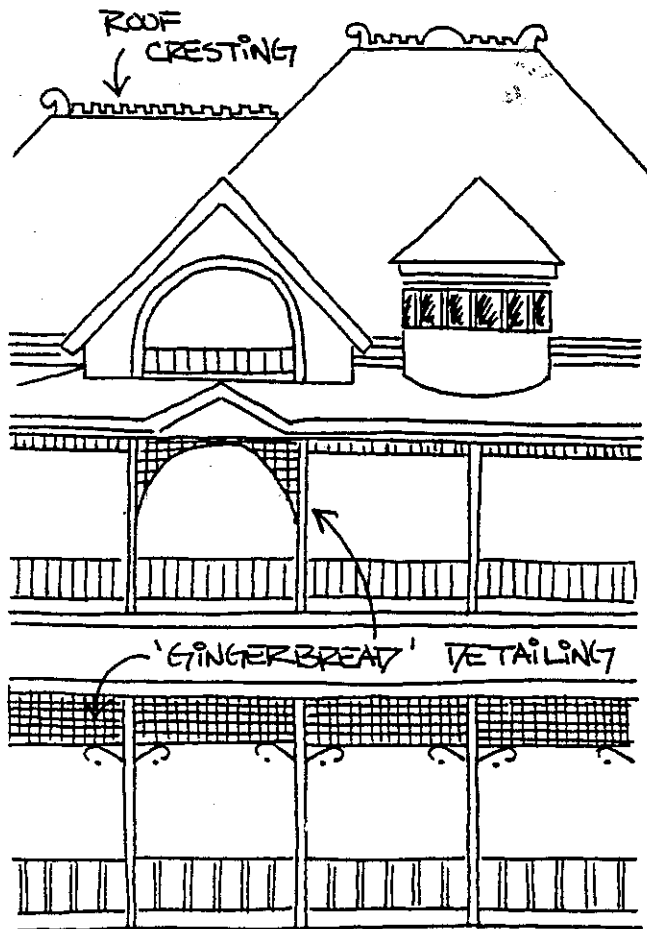
CITY SEARCH: ITALIANATE (1850-1885)

Grand Italian country villas were the model for Italian Villa and Italianate design. Both symmetrical and asymmetrical Italianate floor plans may be found today in Charleston. Easily identifiable features are a rectangular tower element with a low pitched, hipped, overhanging roof with elaborate double brackets under the eaves. A series of round headed arched windows, or round headed arches in an open colonnade (piazza, porch), round headed doors and a balustrade along the roof or along the balconies are also common clues. Windows and arches are sometimes grouped in threes, with projecting bay windows. Other openings can include an oculus (round window), and cupola. Detail around doors and windows has wide trim, bold lines, and often

includes heavy ornamentation with scrolls and shells. Wood buildings are covered with clapboard. Stuccoed buildings are either smooth or carved to look like stone, sometimes with large quoins on the corners. Original roof materials include slate, shingle, or tin.

In the late 1800's, Italianate design was also popular for commercial buildings. Street fronts would have row upon row of arched windows. The first floors often sported the new innovation of cast iron fronts, and the top of the building projected out with a monumental double bracketed cornice, centered with an inscription. You can find many of these buildings on King Street.

VICTORIAN



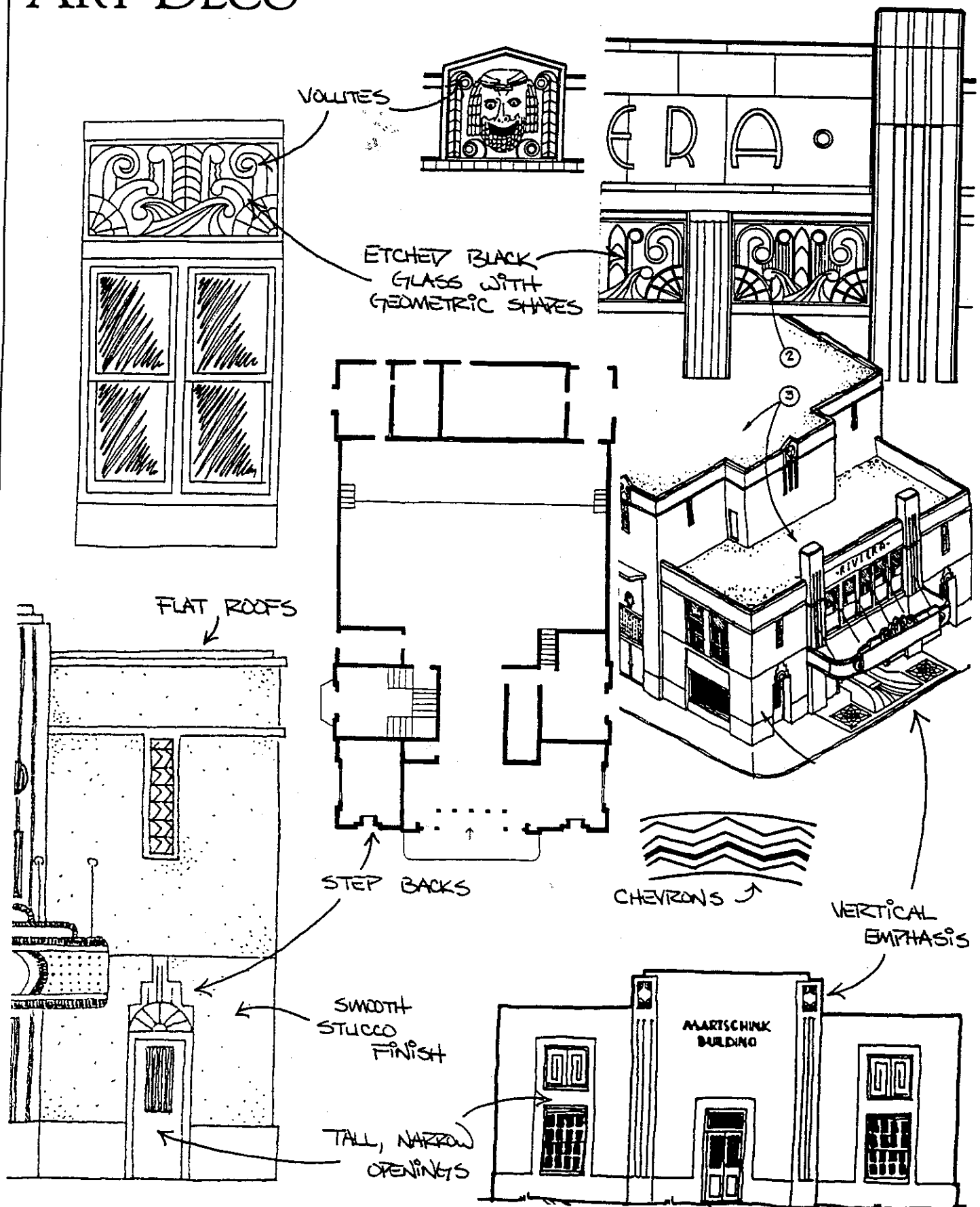
CITY SEARCH: VICTORIAN (1860-1900's)

The Victorian period encompasses a variety of styles popular between 1860-1900's, during the later reign of England's Queen Victoria. As seen in the Gothic Revival era, the invention of new construction techniques (lightweight balloon framing, mass produced windows, doors, siding, and decorative elements) allowed house design to move away from confined squares and rectangles to elaborate shapes from foundation to roof. Specific styles identified with the Victorian period are: Second Empire, Stick (Eastlake), Queen Anne, Shingle, and Richardsonian Romanesque. However, the average Victorian building was a combination of details from many styles rather than a strict study of one.

In general, Victorian houses had asymmetrical floor plans with a complex use of geometric rooms. The outside features most easy to identify are circular turrets, towers, wrap-around porches and covered

entrances (some type of projection over the door). Exterior walls are a rich combination of textures, patterns, and color, using different materials and paint schemes. These effects were produced with stone, pressed tin, and contrasting light and dark paint. Windows came in a variety of shapes and patterns with fairly plain trim. Louvered shutters were invented during this time and were used both inside and out. Lacy wood trim or "gingerbread" was used along balustrades, for brackets, under eaves, across gables, for screen doors, along roof ridges, under turrets, or wherever the builder or client imagined. Iron details included pinnacles, finials and roof cresting. Roofs were steeply pitched, often with many gables, and highlighted with turrets or eyebrow windows. Roofing materials included shingles, slate (sometimes in colored patterns) or tin with pressed detail.

ART DECO



CITY SEARCH: ART DECO (1920-1940)

Art Deco should be considered a form of decoration rather than a completely integrated style of building design. For example, there isn't a typical Art Deco floor plan. The style became popular after the Exposition des Arts Decoratifs held in Paris in 1925. As the term decorative arts suggests, the exposition influenced everything from jewelry to furniture and lighting. The theme for the exposition was the rejection of classical designs for new, modern ideas. Today, Art Deco items are very popular to collect.

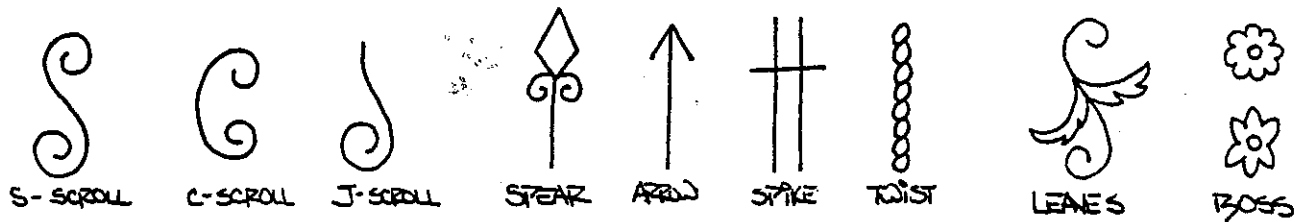
Art Deco was almost always used for commercial structures, though some Art Deco houses were built in other parts of the county (visit Miami!). To identify Art Deco buildings, look for exterior walls with smooth finishes. Stucco, marble, and brick are most common (yellow brick was popular). The lines

of the building are tall, with an emphasis on vertical elements. Entrances are inset, with the facade of the building being stepped (inset layers) and highlighted by the use of angles, geometric shapes, and decorative panels. Multicolored mosaic floor entrances can be found in front of movie theaters. Typical Art Deco details include stylized geometric patterns with zig zags, chevrons, volutes, and figures made from multicolored terra cotta, mirrors, and etched glass. Also popular were metal grilles featuring industrial and art designs. Windows are narrow or round. Doors are tall and narrow with vertical or round windows or decoration.

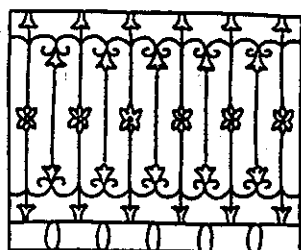
In the 1940's, Art Deco gave way to the Art Modern or Modernistic movement, which focused on horizontal lines and stark geometrics.

IRONWORK

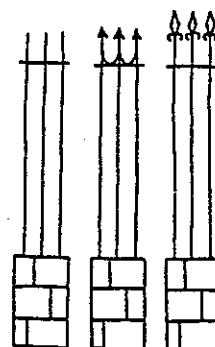
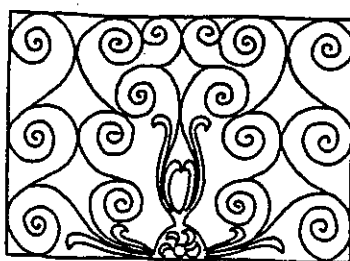
COMMON ELEMENTS:



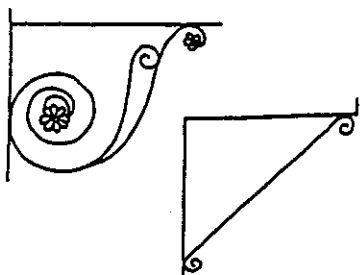
COMMON FORMS:



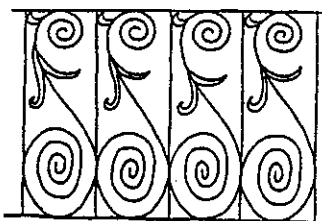
WINDOW GRILLS



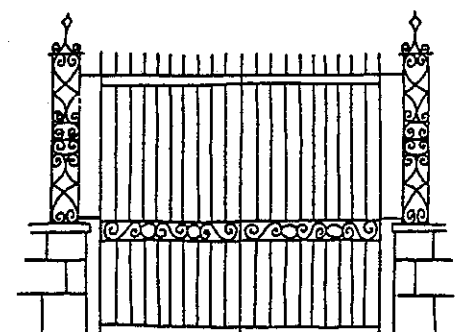
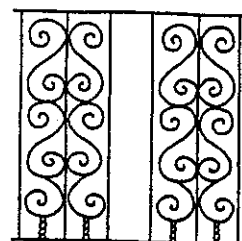
FENCES



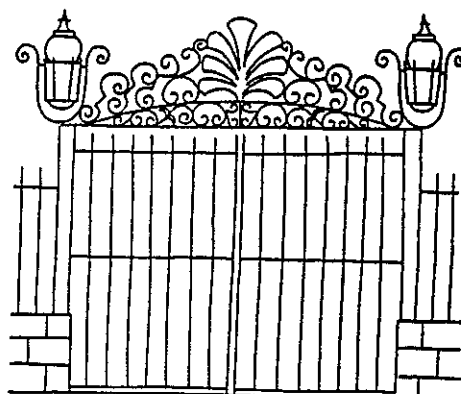
BRACKETS



BALUSTRADES



GATEWAYS



CITY SEARCH: IRONWORK

Ironwork has been an important part of Charleston's architecture since at least 1740, though most of the gates, fences, balconies, sign posts, grilles, and hardware that you see around the city today were made after 1770. It may have been widespread before 1740 since blacksmiths were listed as early as 1722, and were advertising by the 1730's in the Charleston Gazette. Unfortunately, most of the early ironwork was lost either through the great fires of 1740, 1778, and 1796, or changing tastes. Many ironwork pieces were also lost from the early periods when it was melted down for military use during the Revolutionary and Civil Wars.

There are two ways of working iron; it can be either wrought or cast. Using the fire of a hot forge, an anvil, hammers, tongs, and sheer muscle, blacksmiths heat and pound raw iron bars to create wrought iron designs. Cast iron is made by melting the iron and

pouring it into molds. The basic patterns for wrought iron pieces are "S", "C", and "J" scrolls, straps, spikes, arrows, twists, and leaves. They can be combined to form amazing designs and sometimes include surprises like stars, swords, and fish. Cast iron can be made into any shape, and is usually more elaborate than wrought iron.

Ironwork is still very much in demand in Charleston. Factory made fences go up every week, but there are only a few people left who can make hand wrought iron. Phillip Simmons is Charleston's best known blacksmith. His gates have become landmarks in the city and the nation. They are important artifacts of craftsmanship and can also be considered works of art. Our city is very proud that Mr. Simmons' gates are now part of the collection of the Smithsonian Institution and the South Carolina State Museum.

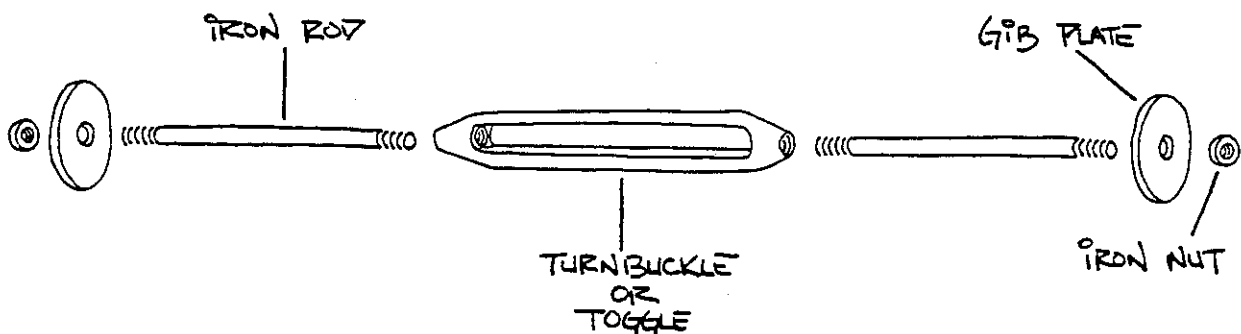
EARTHQUAKE BOLTS

CITY SEARCH: EARTHQUAKE BOLTS

On August 31, 1989, Charleston was hit by one of the biggest earthquakes ever recorded on the East Coast. Its epicenter was in Summerville, and shocks were felt as far away as Canada. Hundreds of buildings in and around the city were badly damaged or destroyed. Buildings that could be saved or rebuilt were, using iron rods for reinforcement. The iron rods were run through walls and anchored with a washer-type device, known as a gib plate, and a large

iron nut. These can still be seen on many Charleston buildings and are called "earthquake bolts". Though earthquake bolts were made in a variety of shapes, they were fairly plain. Some building owners chose to disguise them with cast iron decorations, or stucco. Earthquake bolts have kept many important buildings in Charleston standing since 1886, but no one is quite sure if they will be effective during another big quake.

PARTS OF AN "EARTHQUAKE BOLT" :



TYPES OF GIB PLATES :

