

1985 STUDIO



Fixing Up

*your
camden
rowhouse*

FIXING UP YOUR CAMDEN ROWHOUSE

A NEW GUIDE FOR ROWHOUSE REHABILITATION

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PREFACE

This book was written for the owners of Camden's many row-houses as a practical guide for fixing up their houses while preserving the historic features which make them both unique and attractive. Camden's rowhouses are a significant asset to the city, being on the whole structurally sound and rich in architectural detail. It is hoped that this guide-book will serve as an impetus for the rehabilitation of more and more of these fine buildings; first, by illustrating how attractive much of Camden's existing housing stock is, and secondly, by showing that historically sensitive rehabilitation can be done economically.

The area bounded by Mickle Boulevard, Line Street, Second Street and Haddon Avenue was selected as the focus for study because it contains a wide variety of building types and is beginning to experience some rehabilitation activity. However, much of the information pertaining to this area is applicable to other sections of the city. Although its theme

is the Camden rowhouse, the guide includes data on some public and commercial buildings because they are an integrated part of the residential neighborhood.

The book is the culmination of the work of students in the Camden Studio of the Graduate Program in Historic Preservation of the University of Pennsylvania's Graduate School of Fine Arts. The studio's objective was to explore preservation options for Camden. It is a truly collaborative effort, reflecting contributions from persons with backgrounds in architecture, history, American civilization, art, interior design, law, political science and social work.

The authors wish to thank the many city officials and community leaders in Camden who assisted them in the course of their study, particularly Lori Schuldiner of the Camden City Planning Office and John E. Doyle, Camden's Historic Preservation Planner. Special thanks are also extended to the residents of Camden who for many months endured the authors' examining and photographing their homes and neighborhoods.

THE HISTORY AND ARCHITECTURE OF CAMDEN

GENERAL

The study area exhibits many of the features of a typical mid-nineteenth century residential neighborhood in Camden. In a city where brick rowhouse architecture is the predominant housing form, the areas of Lanning Square and Cooper Plaza have some of the most intact and finest examples, as well as other buildings such as schools, churches and libraries. In an examination of the evolution and historical significance of the area from its initial development during the mid-nineteenth century, the issues of demographics, transportation systems, land development and architecture must be considered.

DEMOGRAPHICS

Until about 1870, Camden's population was small and confined mostly to the waterfront sectors adjacent to the Delaware and Cooper Rivers. Between 1870 and 1920, during the time of the industrial revolution, the population grew from 20,000 to 116,000. Residential neighborhoods like Lanning Square and Cooper Plaza were built up almost overnight and became home for a variety of ethnic groups. The early immigrants in this area were mostly eastern European, British and Irish. Starting at about the turn of the century, a large influx of Italian immigrants began, and by 1920, comprised the majority of the population. Two Roman Catholic churches (Our Lady of Mt. Carmel, and the Church of Sts. Peter and Paul), as well as the Italian Baptist Mission,

still remain in the area. In the mid-1950's, the Black and Hispanic populations began to grow and today comprise a significant portion of the community, particularly in the study area.

TRANSPORTATION

Prior to its development as a residential neighborhood, three well-established roads ran through the area:

- Haddon Avenue - formerly Haddonfield Road, circa 1720
- Broadway - formerly the Camden-Salem Road, connecting Gloucester and Cooper's Ferry, circa 1763
- Newton Avenue - circa 1810

Trolley lines emerged toward the end of the nineteenth century and provided the stimulus for construction of many of the rowhouses along the various routes. In 1896, the Camden Suburban Railway Co. consolidated some existing lines with several in Lanning Square. At that time also, a double track ran down Broadway, while single tracks were on sections of Mickel, Line, Haddon, Fifth, Sixth and Eighth Streets. The trolley lines were conceived as extensions of the ferry industries and eventually served as connections between the newly created residential districts and the city's center of business. In addition, they provided convenient access to the much larger marketplace in Philadelphia.

LAND DEVELOPMENT

In 1820, Samuel Lanning, the first Mayor of Camden, bought a parcel of land which included what is now Lanning Square. He held the land for a number of years but did not build on it. The first real impetus for development was the construction of the Cooper Hospital in 1877. Developer George Holl purchased a tract of land shortly thereafter, and constructed approximately 100 Queen Anne style rowhouses with mansard roofs, which imitated the architecture of the hospital. Most of the existing rowhouses were built in the period between 1877 and 1902.

Commercial development in the study area has concentrated along Broadway, although isolated businesses do exist elsewhere. Major public buildings include the Elementary School at Broadway and Clinton Streets, and the Public Library, funded by Andrew Carnegie, at Broadway and Line.

ARCHITECTURE

In 1853, construction of frame buildings in Camden was prohibited by a city ordinance (for fire prevention), explaining in part the existence of so many blocks of two or three story brick rowhouses. Many of these houses incorporate a wide variety of decorative, locally produced building materials in their design, such as pressed metal, wood and wrought iron. Pressed metal, used widely on cornices and bay windows, was produced by the Camden Metal Works. Developer Wilson Ernst, who worked extensively in the city, owned and operated a planing mill (on Second and Royden Streets), which fabricated wood doors and sashes. The Cooper's Point Iron Works (established 1867) manufactured many of the wrought iron fences which still exist in front of some homes.

THE ARCHITECTURAL STYLES AND DETAILS OF CAMDEN

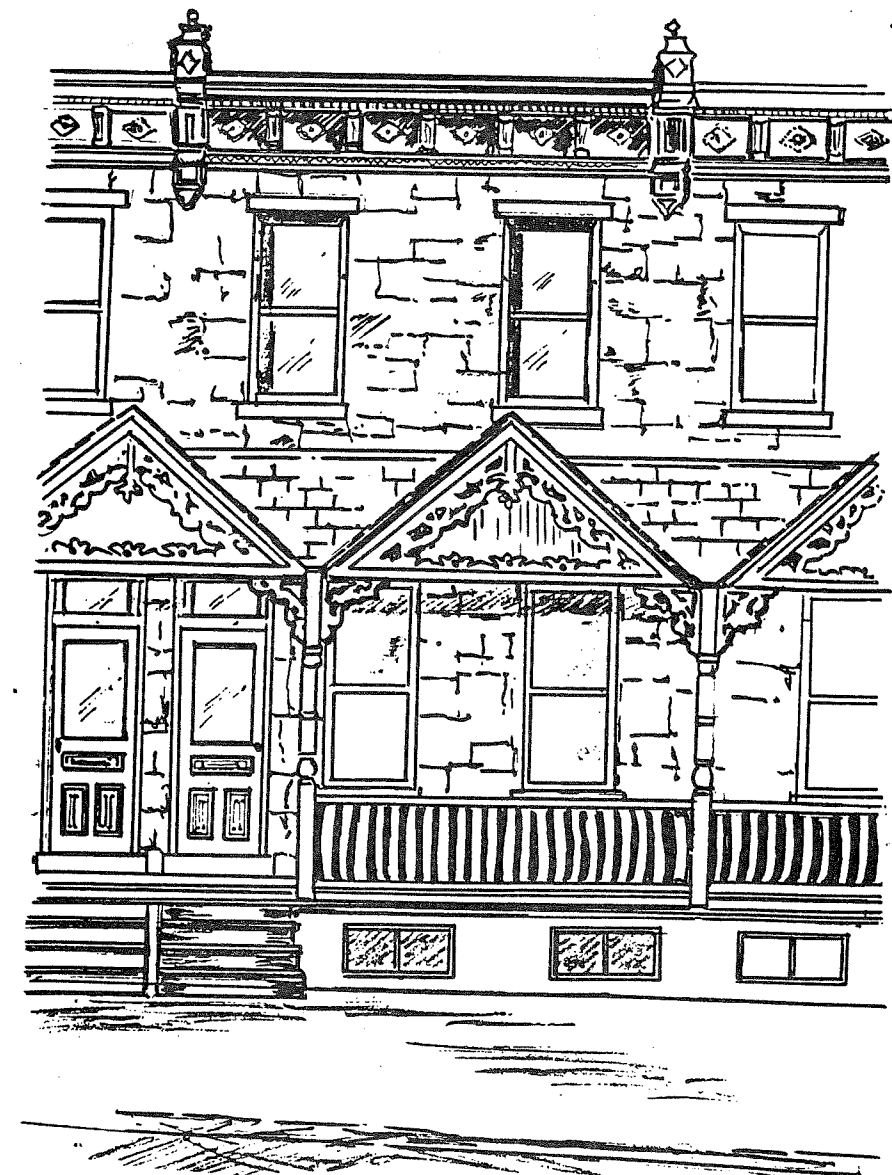
The following catalog of building styles and details provides a survey of typical architectural styles of buildings and building elements found within the study area. It is intended to assist the homeowner in identifying the valuable historic characteristics of his house, as well as providing some models for sensitive restoration. In some cases, illustrations reflect original characteristics of a building rather than existing alterations.



RESIDENTIAL ARCHITECTURAL STYLES

Most of the housing stock in the study area is homogeneous, consisting of two or three story brick rows which were built within a few years of one another. Differences in architectural style among the houses are primarily attributable to differences in the style of their various components, such as porches, windows,

doors, cornices and roofs. By examining the various elements of particular houses, judgments may be made as to which style they most approximate. However, there are frequent instances of houses within the study area whose style can best be described as "mixed." An example of this phenomenon is the 700 block of Royden Street, whose cornices are Italianate, but whose porches are Carpenter Gothic.



. 700 Block Royden Street
c. 1890



. N.W. Corner 6th and Stevens
Streets

Modifications which have been made to a building over the years will also affect its style. A dramatic example of how later modifications affect style is the house located on the northwest corner of Sixth and Stevens Streets. Its fish scale slate roof, brick corbeling, pedimented and projecting dormer, and slender chimney suggest that the house was originally of the Queen Anne style. However, the later addition of a pent roof, pedimented portico and shutters give the facade facing Sixth Street a Colonial Revival appearance.

The area's houses can be separated into two general stylistic groups: earlier Italianate and later Victorian varieties showing Queen Anne and Eastlake details. The characteristic elements of those styles, as well as local examples, are discussed below.

Italianate

Examples of this style in the study area include:

- . 406 Benson Street
- . 556-58 Newton Street
- . Royden Street between Sixth and St. John Streets
- . Line Street between Sixth and Seventh Streets

The illustrated examples show the following characteristics typical of this style:

- . overall rectangular shape
- . flat roof
- . prominent cornice with large, often paired, brackets
- . segmented or rectangular arched window openings
- . square porch posts

. 406 Benson Street



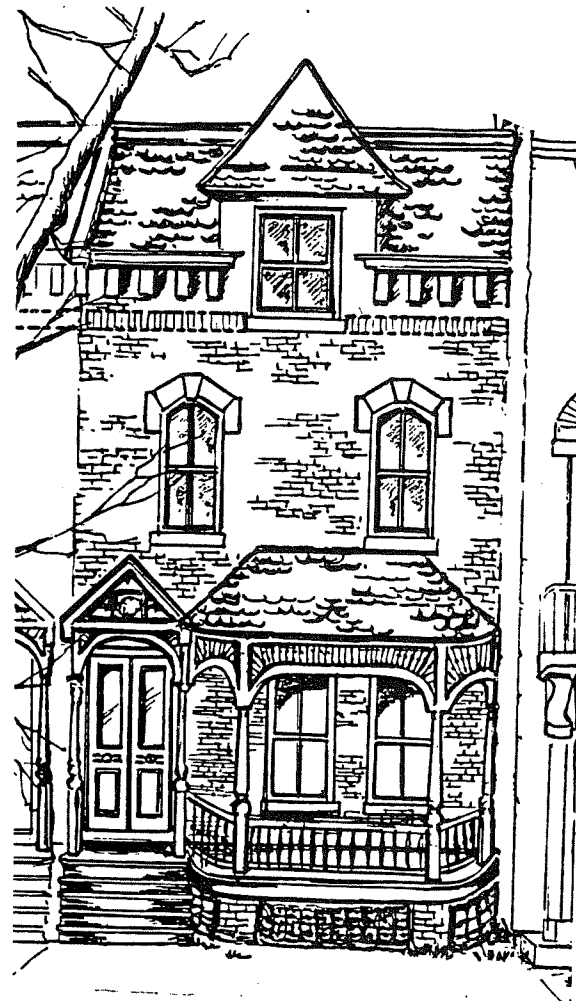
. 556-58 Newton Street
c. 1890





. Line Street between 6th and 7th Streets

. 500 Block Benson Street



Queen Anne/Eastlake

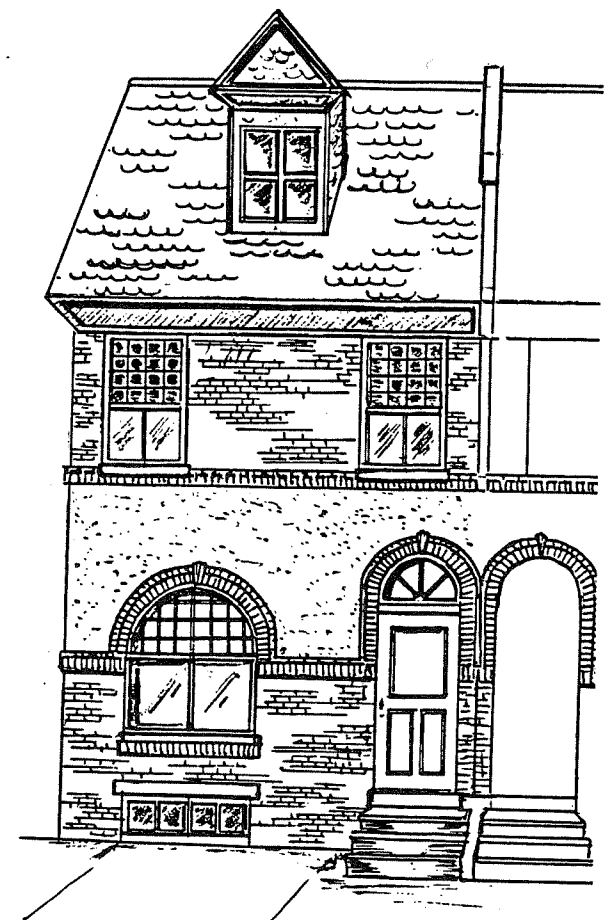
Examples of these closely related styles in the study area include:

- . 500 block Benson Street
- . 600 block Benson Street
- . 600 block Berkeley Street
- . 603-23 West Street

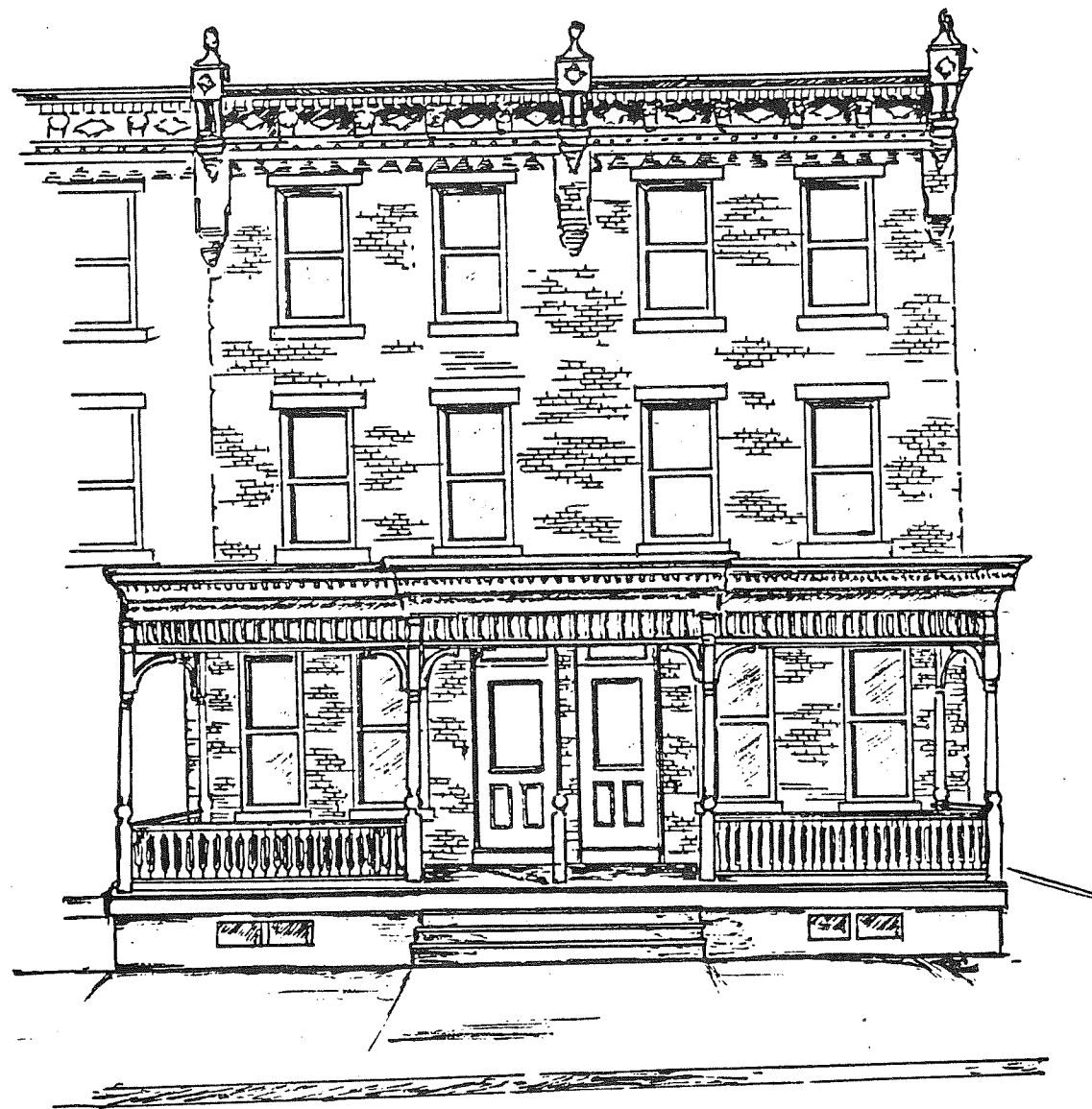
The illustrated examples show the following characteristics:

- . overall vertical proportions

- . corbelling of brickwork
- . slender chimney
- . mansard roof with diagonally patterned slate
- . pedimented and projecting dormer
- . porch details include tapered round columns, spindle balusters, spindles across the top of the porch and fan-like brackets



. 603-23 West Street



. 600 Block Berkeley Street

PUBLIC AND COMMERCIAL ARCHITECTURAL STYLES

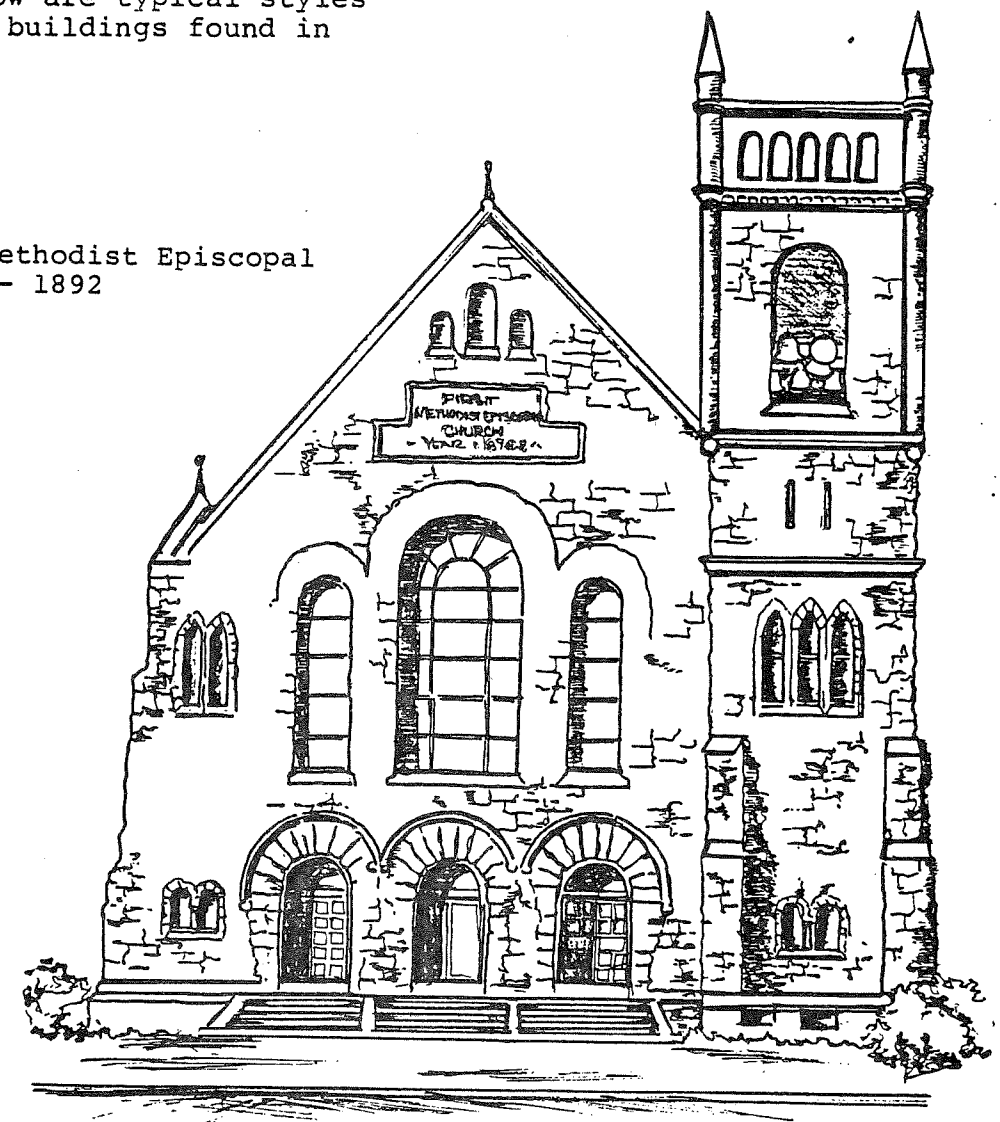
Located within the study area are many buildings, such as churches, libraries and commercial buildings, which contribute to the overall architectural and historic ambience of the area. Frequently, due to the higher budgets which were available to finance their construction, these buildings reflect the "high style" architecture which was in vogue at the time of their construction. Set forth below are typical styles of public buildings found in the area.

Romanesque Revival

An example of this style is the First Methodist Episcopal Church located at Sixth and Stevens Streets. The illustrated example shows the following characteristics typical of this style:

- . monochromatic rockfaced stone finish
- . semi-circular arched window and door openings
- . square tower with parapets

. First Methodist Episcopal Church - 1892



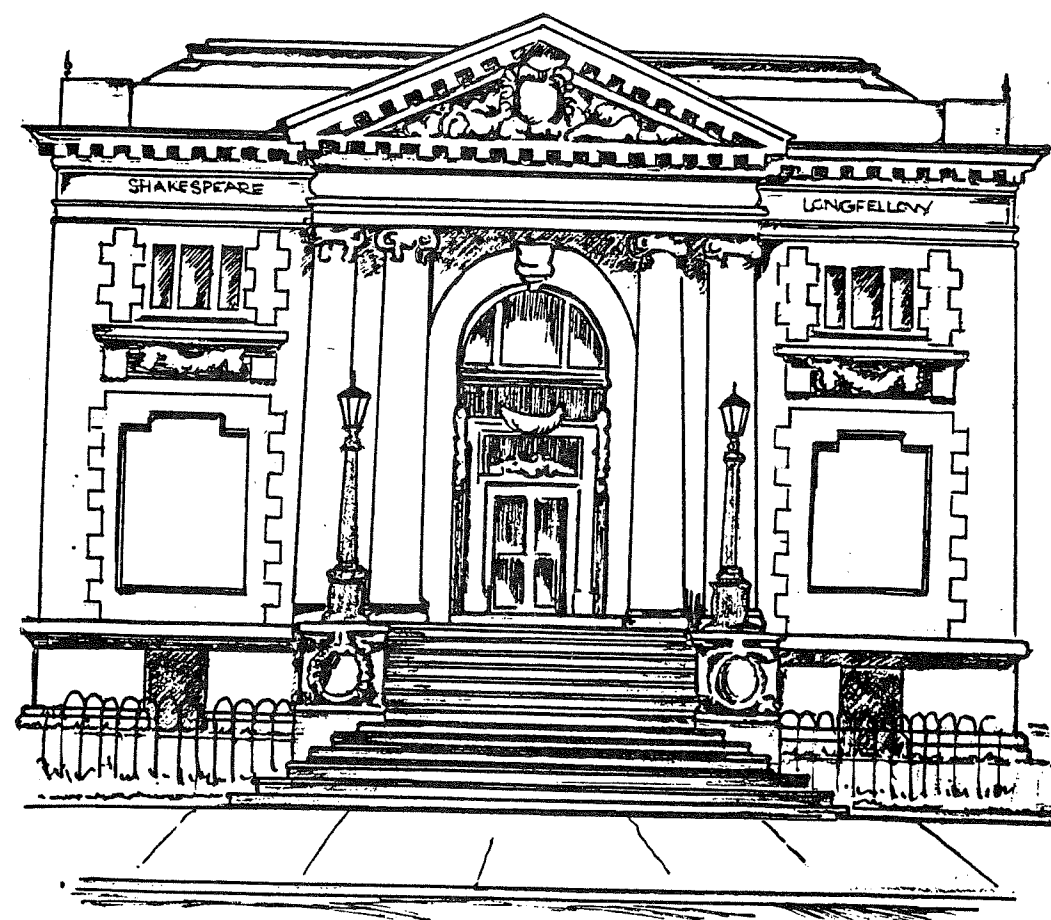


. Broadway between Berkeley
and Washington Streets

Queen Anne

An example of this style in a commercial building is located on the east side of Broadway between Berkeley and Washington Streets. Characteristics of this style which are evident in this illustration include:

- . textured wall surface
- . pendant shaped parapet
- . rich decoration
- . polychromatic building materials

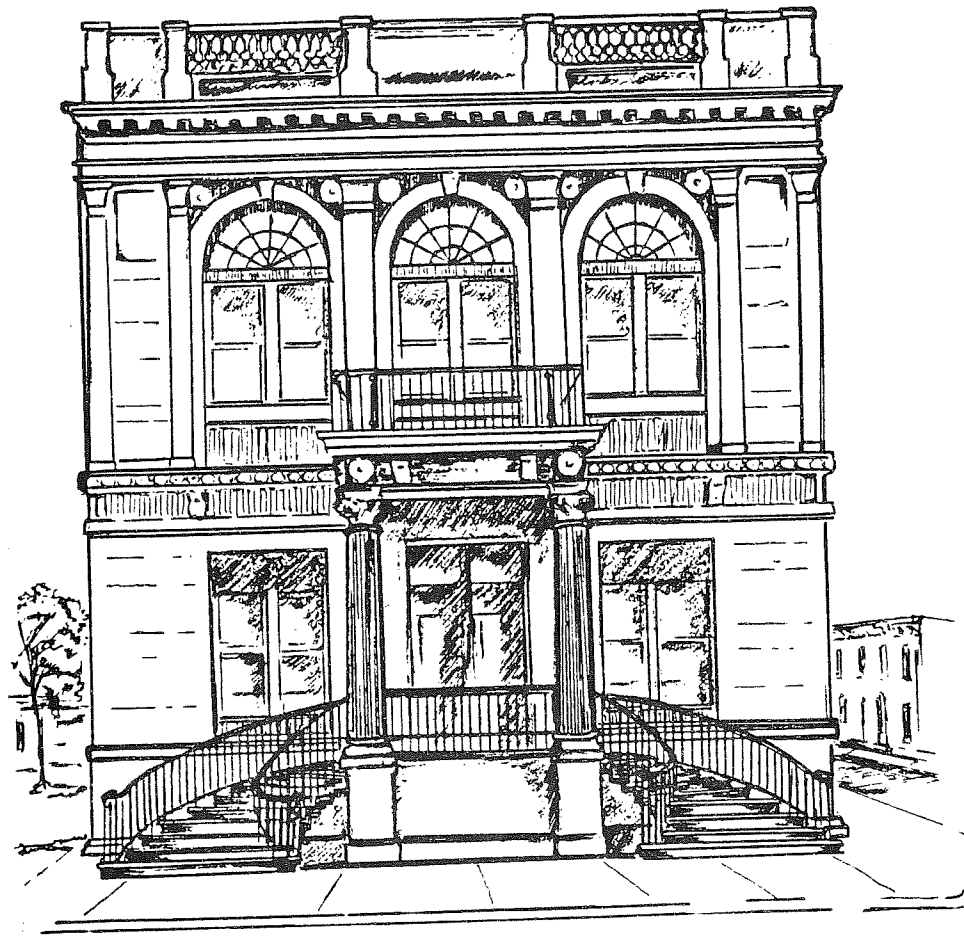


. Camden Free Public Library
1904-05

Beaux Arts Classicism

The Camden Free Library, located at Broadway and Line Street, and the Camden Community Center, located at Broadway and Royden Street, are examples of this style. These illustrations exhibit the following characteristics:

- | | |
|-------------------------------|------------------------|
| . symmetrical form | . smooth wall surface |
| . pedimented central pavilion | . raised basement |
| . monumental columns | . sculptured spandrels |
| | . limited color range |
| | . parapet |
| | . balustrade |



. Camden Community Center

Colonial Revival

A commercial example of this style is located on the east side of Broadway between Washington and Benson Streets. This building contains the following elements which are characteristic of this style:

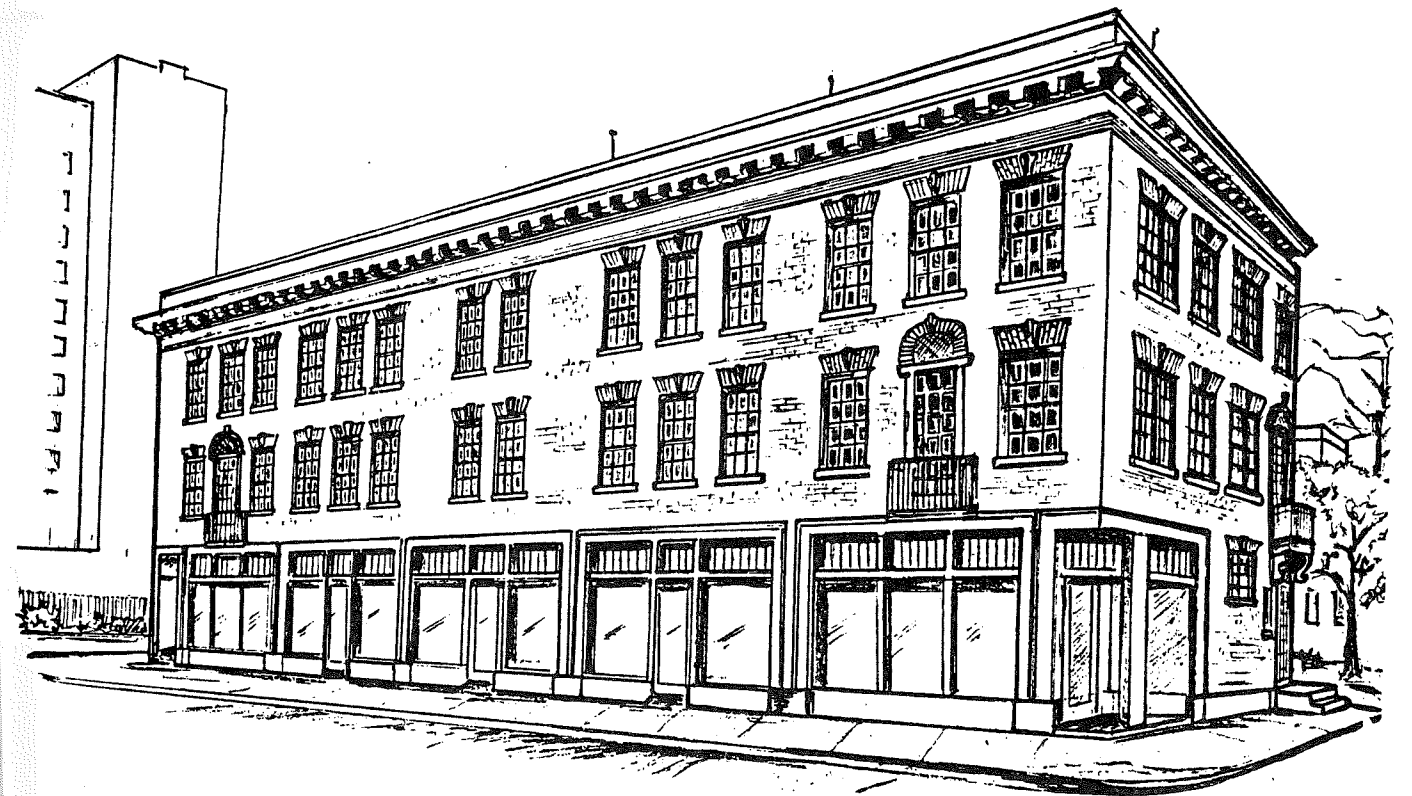
. symmetrical form

. modillioned cornice

. red brick with wide mortar joints

. keystones over windows

. six over six double hung windows



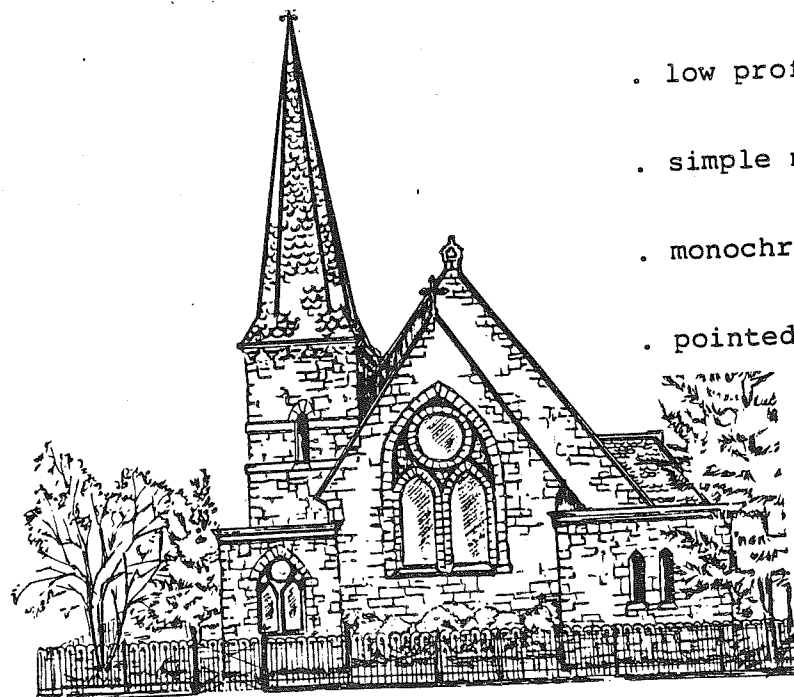
. Broadway between Washington and Benson Streets

Vernacular Victorian

Berkeley Hall, located at Sixth and Berkeley Streets, is a striking example of Camden vernacular Victorian architecture. Typical of this style are the following characteristics:

- . overall symmetrical form
- . corbelled brick
- . prominent cornice with large brackets
- . ornate pediment at the roof

Berkeley Hall is also a significant example of Camden's distinctive corner buildings which often created easily identifiable points of orientation at the ends of blocks of indistinguishable rowhouses.



. Berkeley Hall
c. 1895

Parish Gothic

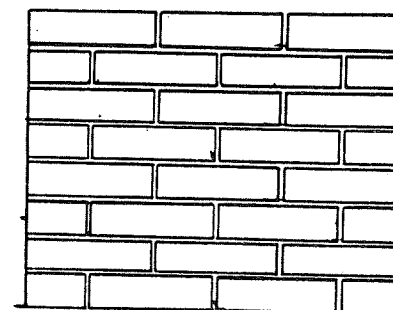
St. John's Episcopal Church, which was designed by Philadelphia architect Frank Furness, is an example of this style. Typical characteristics of this style are:

- . low profile
- . simple massing
- . monochromatic stone facing
- . pointed arched window openings

. St. John's Episcopal
Church c. 1871

RESIDENTIAL BUILDING MATERIALS

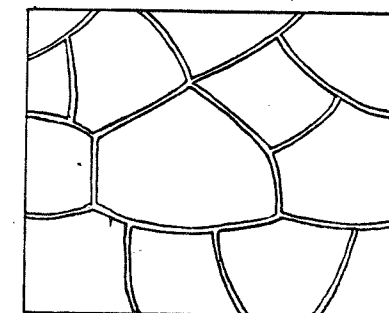
There is a high degree of homogeneity in the building materials as well as the style of Camden's residences. The majority of the study area's residential rows are constructed of machine pressed brick laid in the American bond pattern. Notable exceptions to the general rule are the stone facades appearing on the 700 block of Washington Street and the 700 block of Royden Street, as well as the original stucco facade on the 600 block of West Street. Many of the brick facades of houses have been painted in a variety of colors over the years. Usually the joints between the bricks (pointing) have been painted in a contrasting color. Royden Street between Sixth Street and St. John Street contains many examples of such painted brick houses.



. Brick pattern
American Bond

Original slate shingles generally appear on the roofs of houses other than those having flat roofs. The flat roofs are usually covered with metal sheets or built-up roofing. Decorative elements such as cornices, porches and bay windows may be constructed of wood

or pressed metal, or a combination of the two materials. An example of such use of pressed metal in a porch structure is located on the north side of the 500 block of Washington Street.



. Stone facing

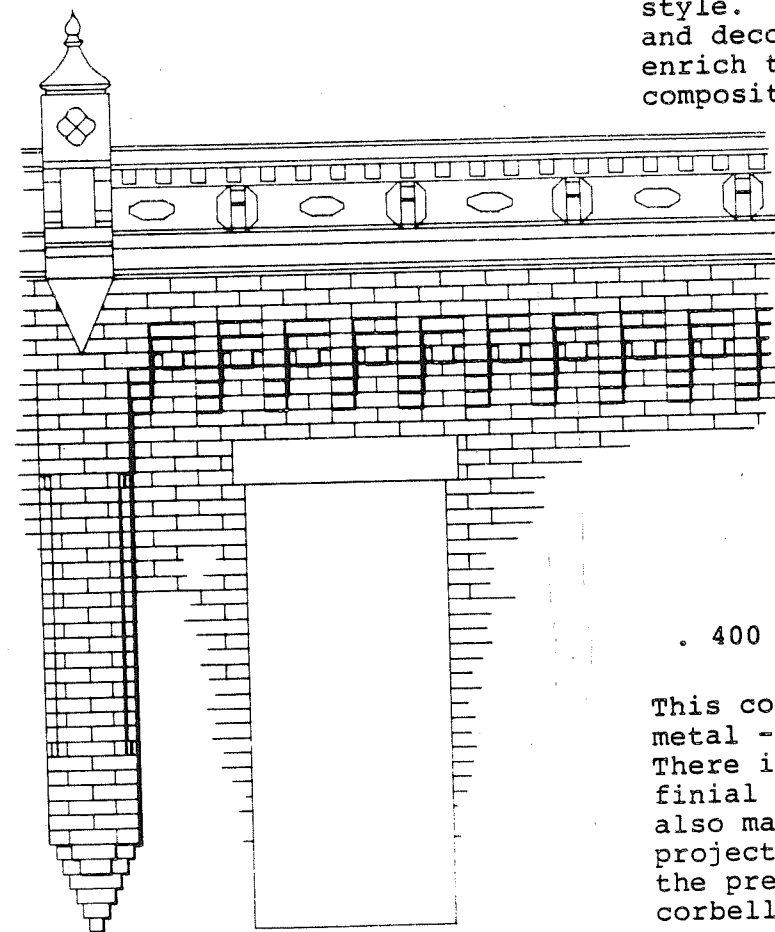
The windows of some of the larger Italianate houses have brownstone or marble lintels and sills. Most doors and windows are made of wood. Common materials for front steps are brownstone, marble and concrete. A profusion of decorative wrought iron fencing remains in front of many of the larger houses.

PUBLIC AND COMMERCIAL BUILDING MATERIALS

As in the case of the residential buildings, the most frequently used building material for public and commercial buildings in the area is brick. However, more expensive stone trim is usually evident in the details of the brick commercial buildings, such as in window frames and lintels.

Limestone is featured on two prominent buildings located within a block of one another on Broadway: the Camden Community Center at Royden Street, and the Camden Free Library at Line Street. While the community center is faced entirely with limestone, the library combines yellow brick with limestone ornament.

Rough rockface stone, which is not common in Camden, appears on several churches, such as the First Methodist Episcopal Church at Sixth and Stevens Streets and St. John's Episcopal Church at Broadway and Royden Street.



ROOFS, CORNICES, GUTTERS AND CHIMNEYS

A cornice is the decorative projection at the eave line of a building. The eave occurs at the intersection of the facade and the roof. The cornice often conceals the gutter, which drains rainwater from the roof. Cornices on many of Camden's rowhouses are made of wood and corbelled brick. Pressed metal was also used extensively because it could be mass produced to imitate hand carved stone and wood decoration found on more expensive homes of the period.

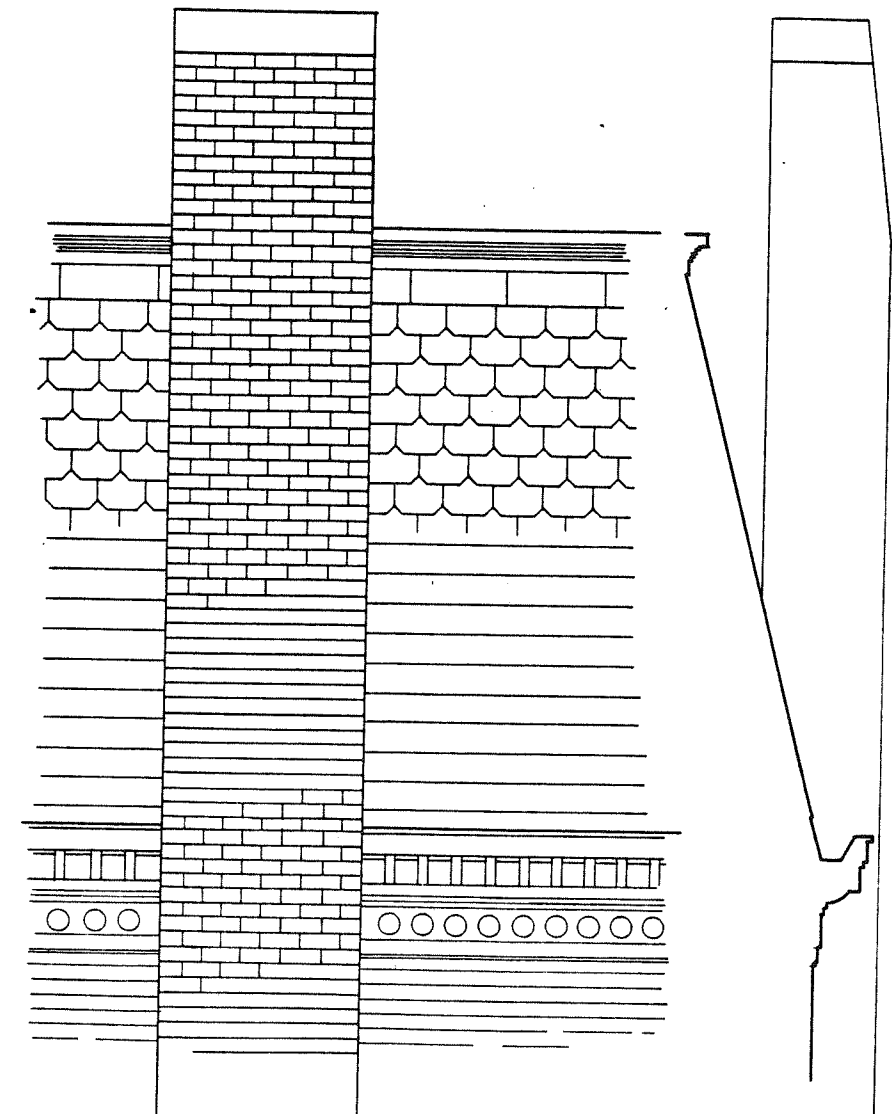
The cornice is important to the rowhouse because it is one of the elements that indicates style. These architectural and decorative features greatly enrich the overall architectural composition of the buildings.

. 400 Block Benson Street

This cornice is made of pressed metal -- probably zinc or tin. There is a large decorative finial at the corner which is also made out of metal. The projecting brickwork under the pressed metal is called corbelling.

This drawing contains three important architectural elements. The first element is a mansard roof, covered with gray slate roofing tiles, which were popular during the late nineteenth and early twentieth centuries. Slate is a heavy, durable stone roofing material, which often can last a hundred

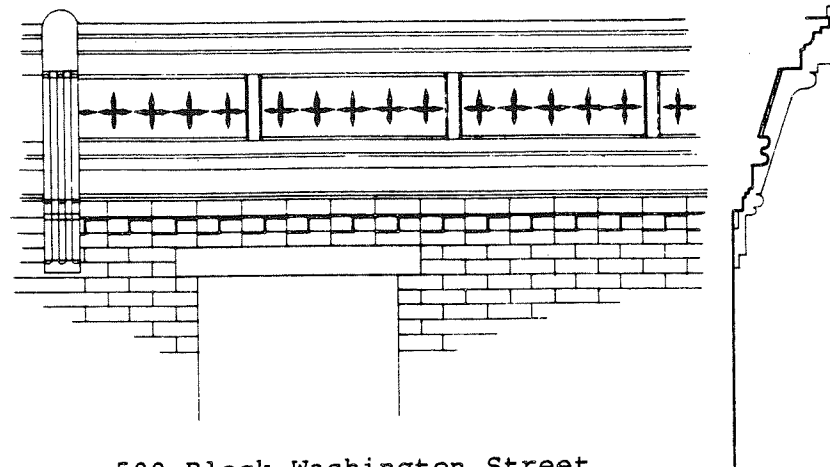
years. The second element is a handsome brick chimney which rises above the roof line. A chimney must be higher than the roof, both for safety from sparks and to insure that it creates sufficient draft to vent the fireplace, stove or heater. The third element is a pressed metal cornice.



. Washington and Trenton Streets

This cornice is made of pierced wood. It has brackets which hold up the overhang of the cornice. These heavy looking brackets are of the Italianate

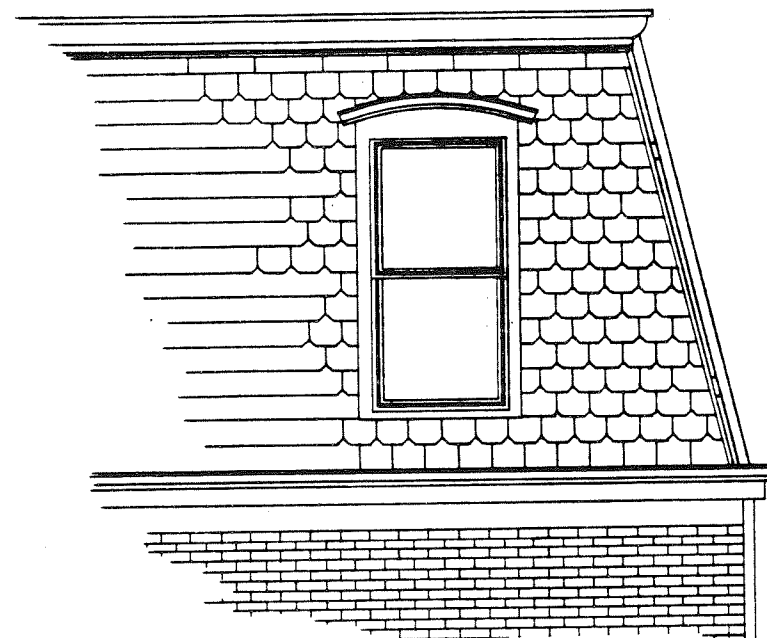
style, which was popular at the time this row of houses was built in the 1880's. This type of cornice often conceals a gutter behind it.



. 500 Block Washington Street

This mansard roof is covered with slate in a fish scale pattern. Slate is available in many patterns and colors. Sometimes slate roofs contained

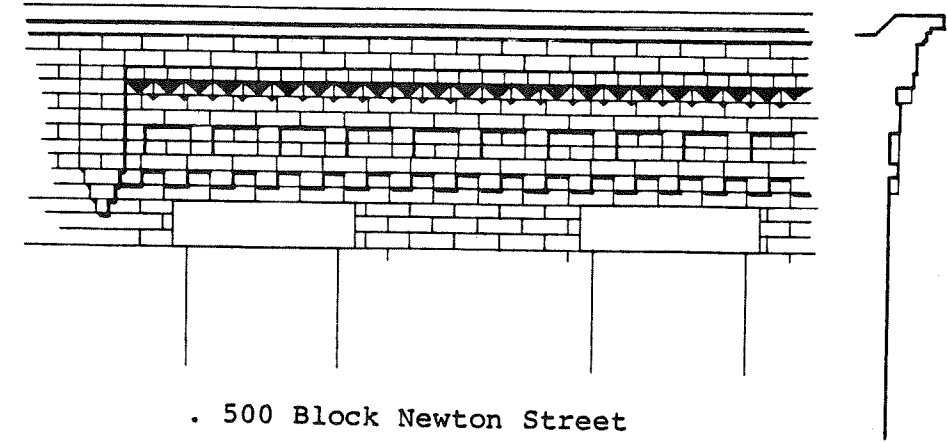
two or three colors and different shapes of tiles, which were combined in beautiful, decorative patterns.



. South 7th Street

The cornice of this house is made entirely of corbelled brick. The bricks under the upper three rows have been laid in a diagonal pattern to create

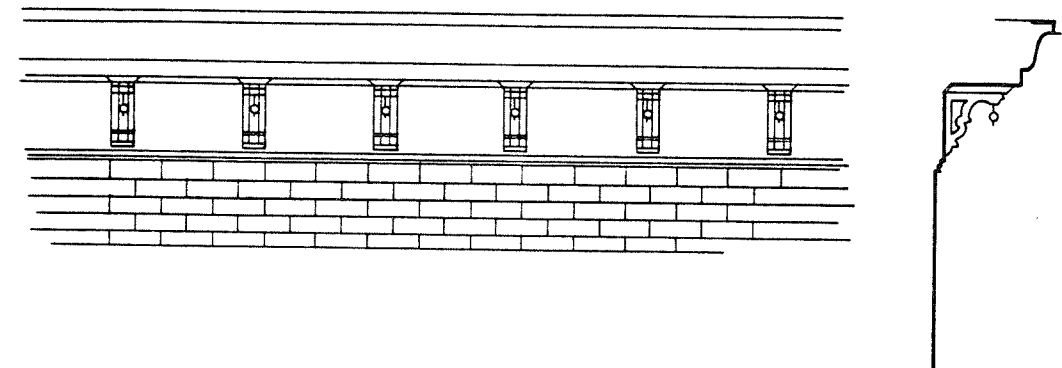
an interesting and attractive design. Other patterns in the brick are made by using dark glazed bricks.



. 500 Block Newton Street

The various parts of this wood cornice were mass produced by machine, a process that enabled the builder to pick and choose the design of the cornice from many patterns and combinations of patterns. Manufacturers of decorative wood elements pub-

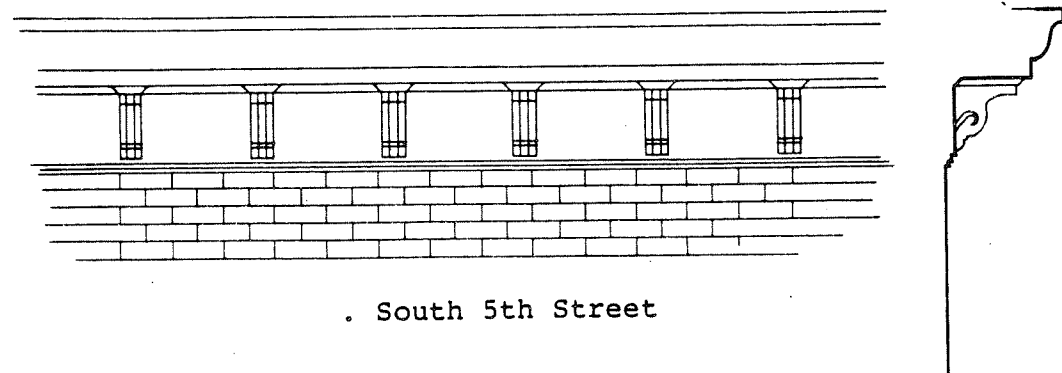
lished elaborate catalogs and pattern books of their designs. This wood cornice is Italianate in style, with evenly spaced brackets supporting the overhang of the cornice. The brackets are decorated with pendants.



600 Block Line Street

This wood cornice has curved brackets which act both as supports and as decoration.

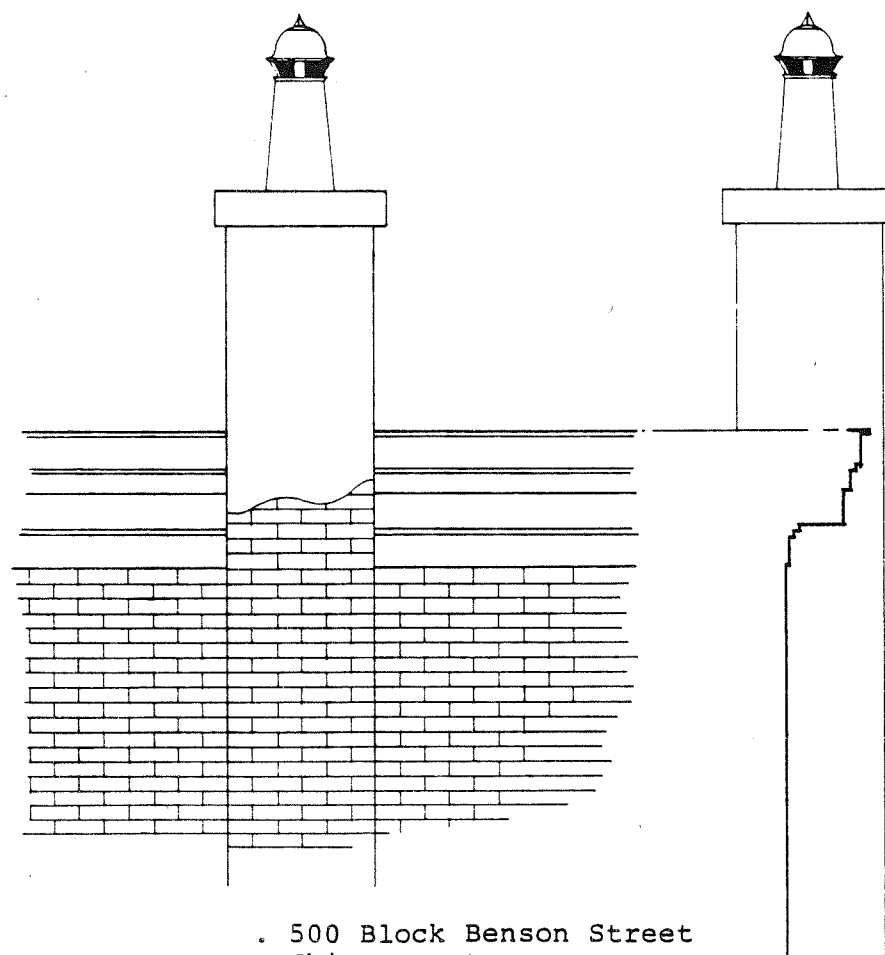
Unlike the cornice shown in the previous drawing, this cornice does not have pendants.



. South 5th Street

A common element found on nineteenth century chimneys is the terra cotta chimney pot, whose function is to extend the height of the chimney. Its purpose is to insure an even flow of

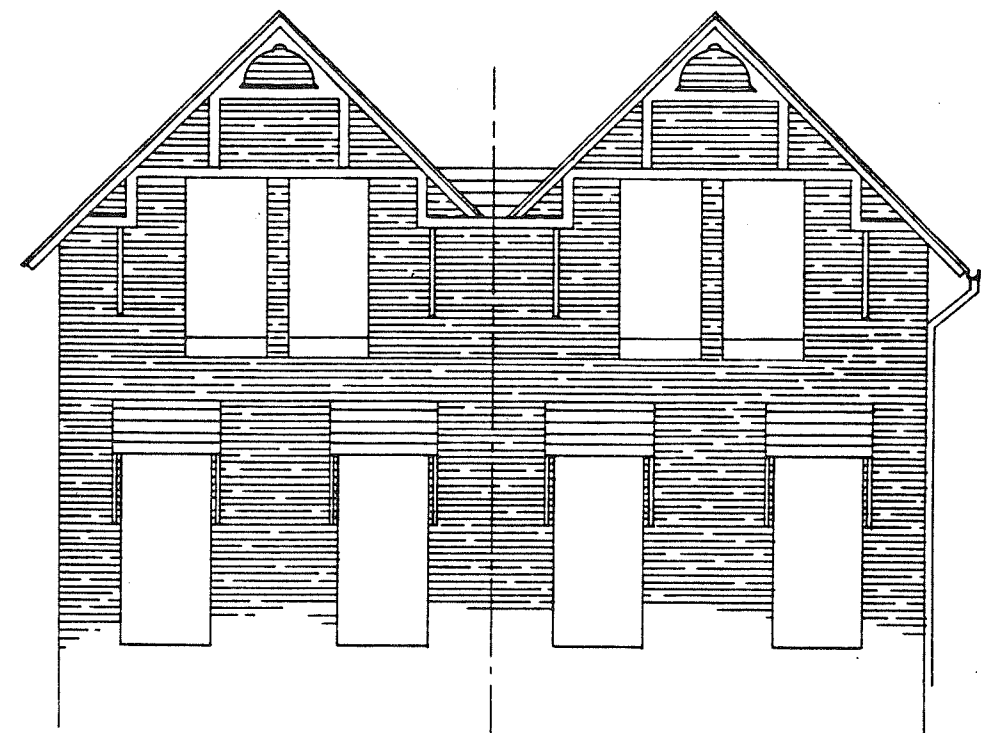
air, providing a good draft when the chimney is in use. The chimney pot also helps to keep rain and birds out of the chimney.



. 500 Block Benson Street
Chimney pot

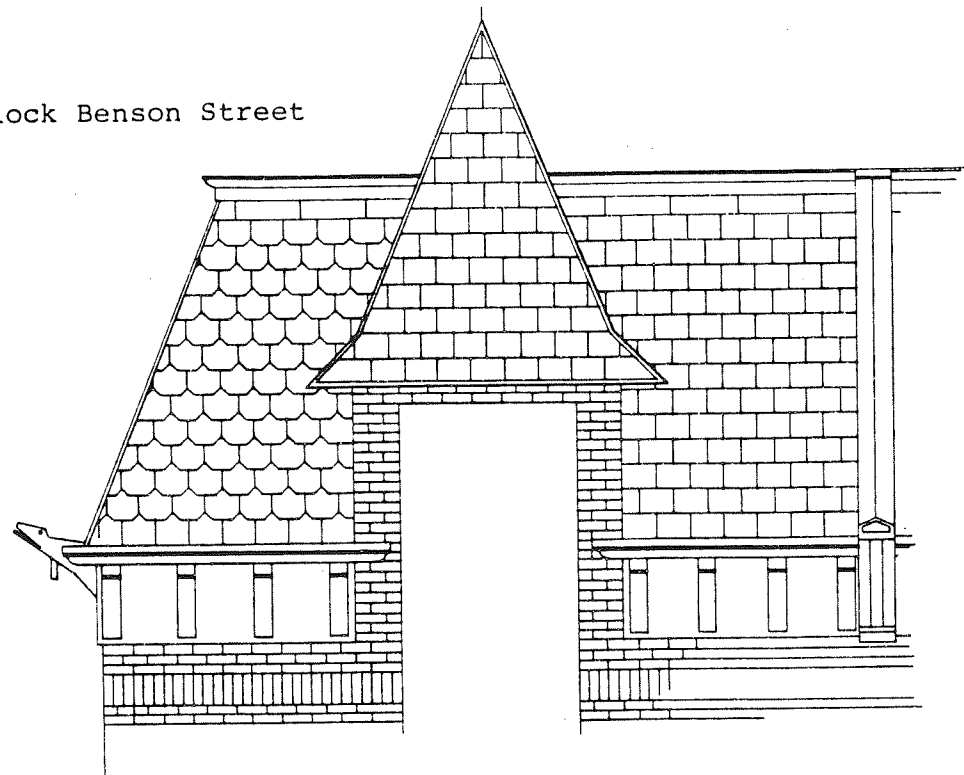
This drawing shows the gable end of a roof. The roof functions as a watertight cover for the house. This roof has decorative elements called barge boards. These elaborately carved barge boards and other wood items were mass produced by planing mills and offered for sale in catalogs. They are interesting and important architectural details which contribute greatly to the overall style and character of the house.

The vertical downspout, at the corner of the building facade, receives rainwater from the gutter in the eave of the roof, carries it down to the ground and directs it away from the house. Gutters and downspouts are critical elements of the building, since their primary function is to prevent water from entering the roof and walls.



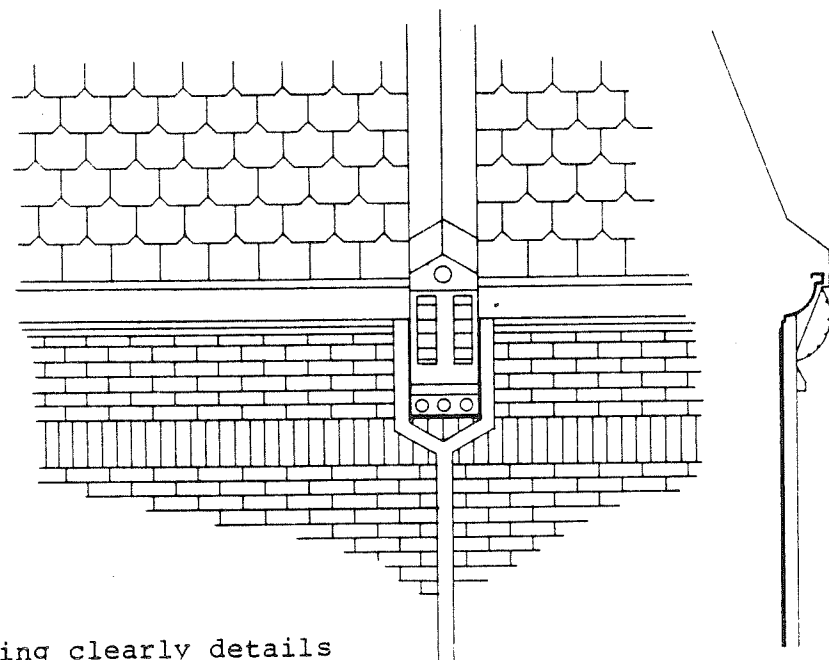
. 400 Block Benson Street

. 600 Block Benson Street



This house has a Queen Anne style dormer and a mansard roof. The gutter empties into a metal funnel called a conductor head. The decorative conductor head channels the rainwater from the

gutter to the downspout. Another decorative metal element is the "gargoyle," a waterspout in the shape of an alligator, which projects from the roof gutter.



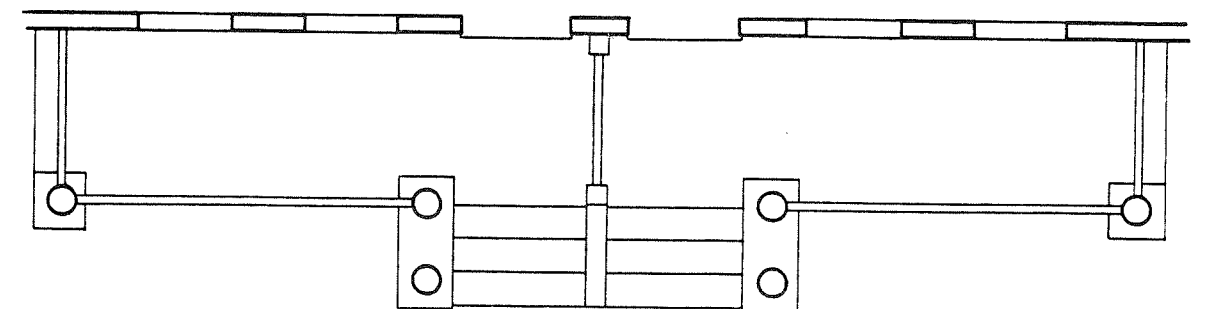
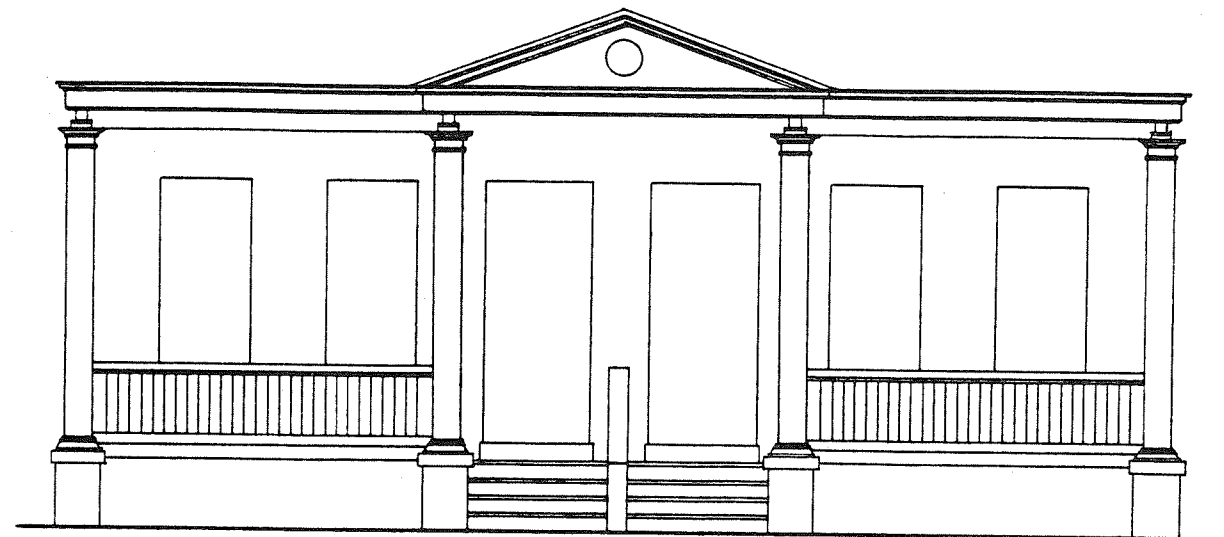
This drawing clearly details the building's original conductor head and downspout.

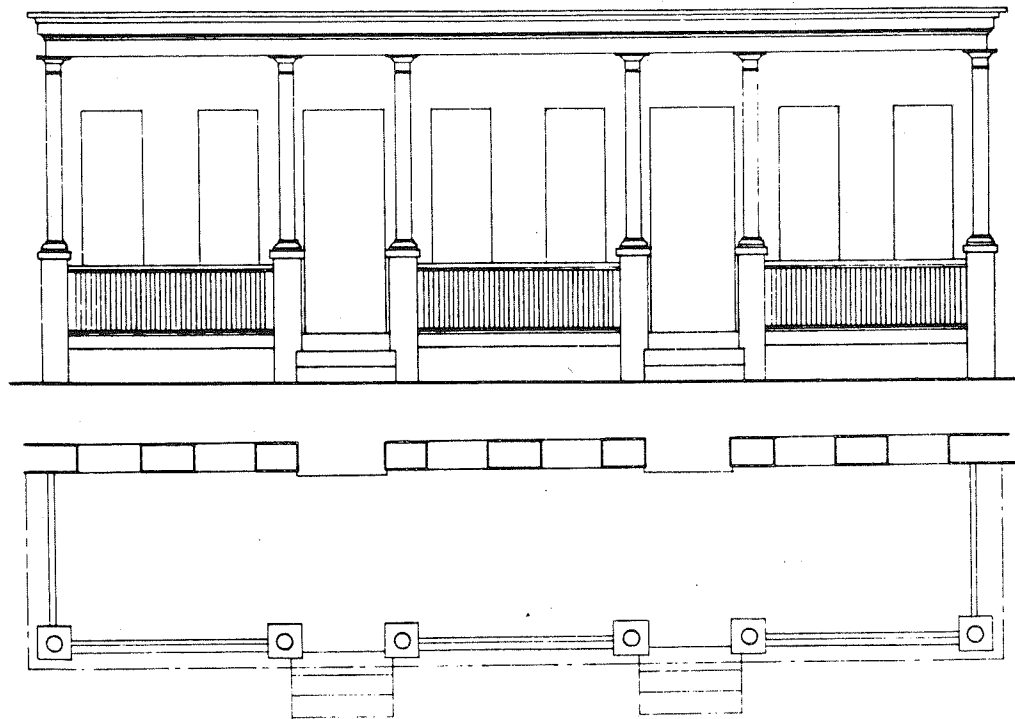
. 500 Block Benson Street

PORCHES

There are many different types of porches in the study area. While the rowhouses themselves are all very similar in design and construction, there seems to have been an effort by the designers to make each row a little different, and the variety of porches shows this clearly.

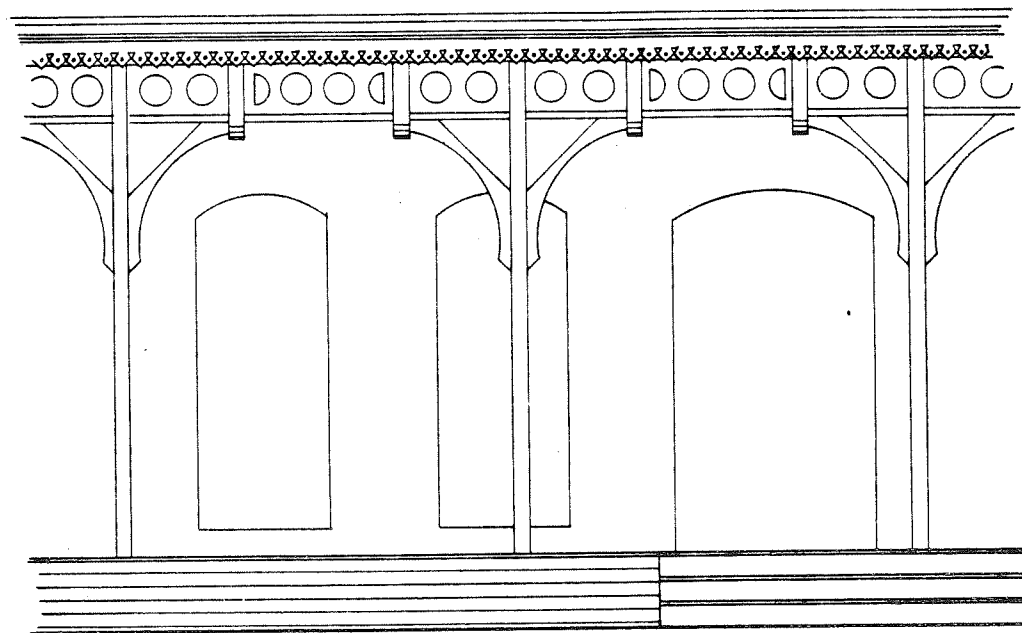
One element of the porch which has many different designs is the roof. Some porches have flat roofs, while others have sloped roofs. Many of these roofs have pediments above the entrances. Some of the pediments are made of pressed metal, while others have elaborate wood "gingerbread" moldings.





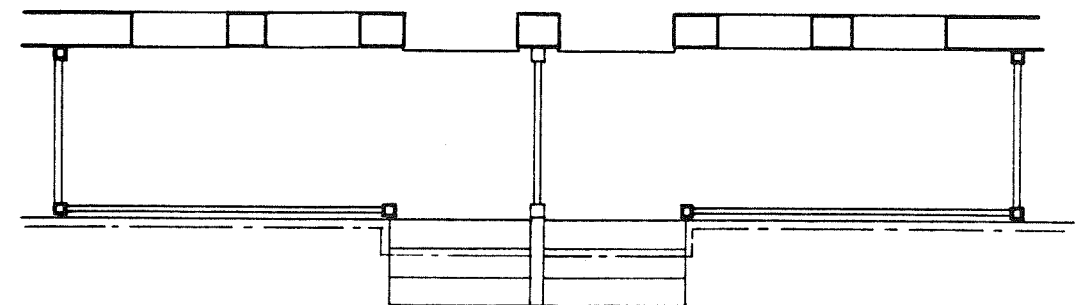
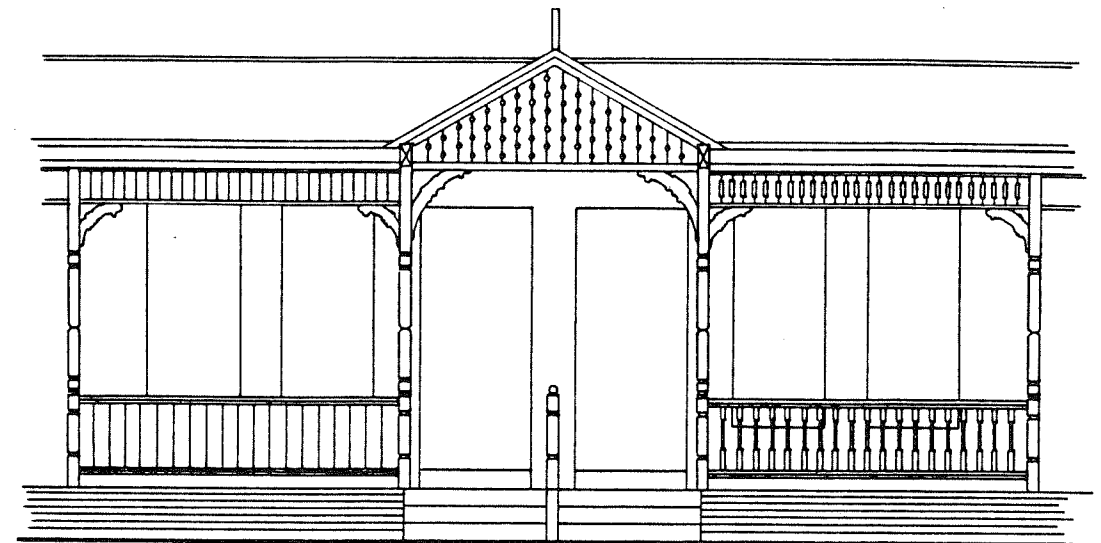
The supports or columns which extend from the roof down to the floor of the porch also exhibit a variety of different forms. On some, the supports are merely square posts with braces at the top and bottom. On others, the posts are turned (carved on a lathe) to give a

more ornamental appearance. Some supports are made out of cast iron or steel (although many of these are not original). The majority of the original porch supports in the study area are in the form of columns which imitate the classic Greek orders. The most common type



is the Doric column. The capital (top) of this order is made up of various types of rounded moldings which form a simple yet impressive profile. The column itself may be either fluted (ridged) or smooth.

Another type which is less common in the area is the Ionic column, which has a more decorative capital with four rounded projections extending out to form a square. These columns can also be either fluted or smooth.

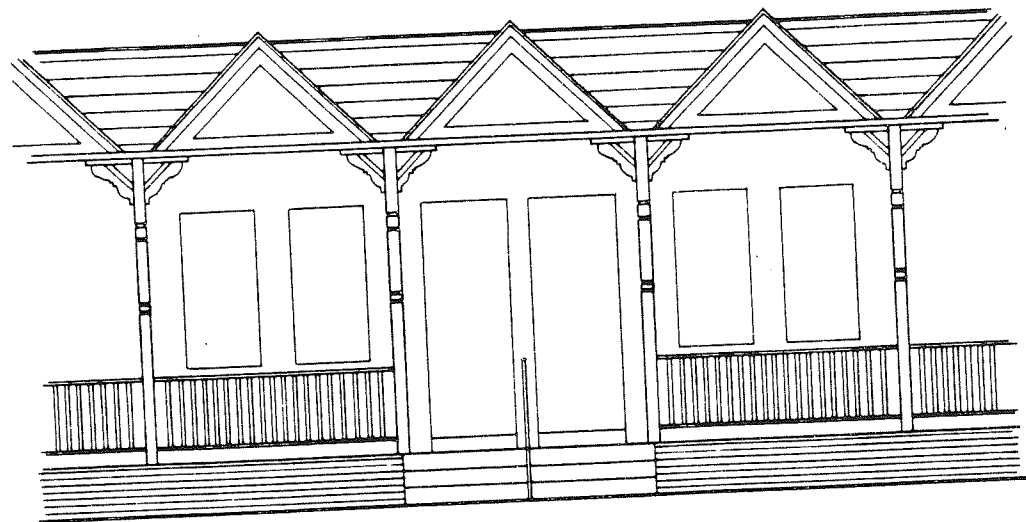


The porch railings are another element that takes many different forms. One rather unusual type, although common in the study area, is the curved railing. The individual balusters were curved by steam-heating the

wood to make it pliable. Another common type is the turned baluster, which is carved into a particular shape by a wood lathe. The profiles of the balusters will vary from one row to another.

The steps to the porches vary not so much in their design as in the materials used for their construction. Some steps are made of wood. Others are of a variety of different types of

stone, such as marble or brownstone. Many steps which have had to be replaced are now made of concrete which is a common substitute for the original materials.

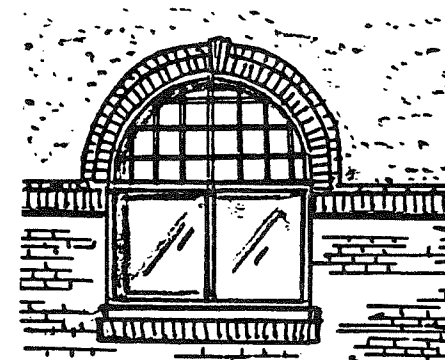
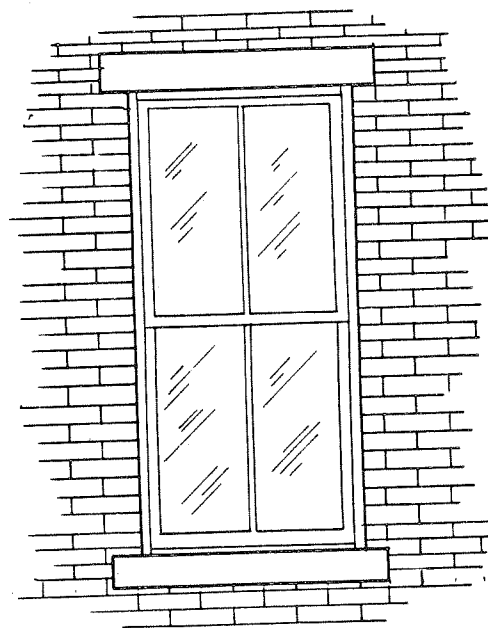


WINDOWS

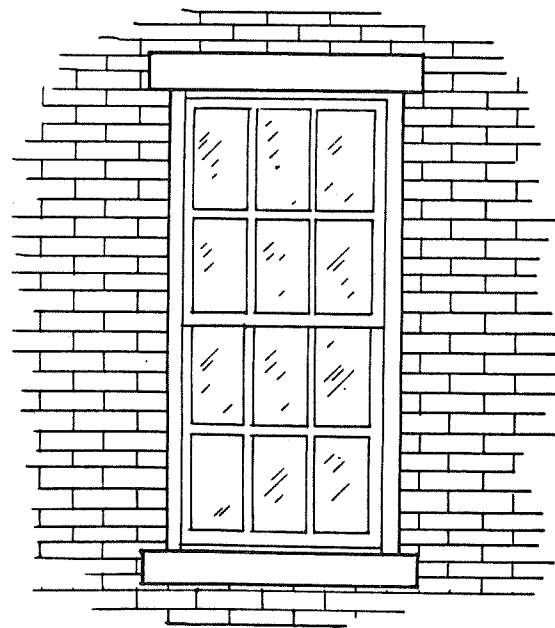
The appearance of a building is strongly influenced by the size, proportion and details of its windows. The windows in Camden rowhouses generally occur in one of three forms: flush with the outside surface of the facade wall; in a bay which projects from the surface of a facade wall; or in a dormer which projects from a sloping roof.

The plain windows in the facade wall are generally rectangular in shape and of a standard size. The window sash, which holds the glass, is set in wood frames that slide up and down in grooves. Individual glass panes are arranged in a variety of patterns: two panes in the upper sash over two in the lower sash; one pane in the upper sash over one in the lower sash; six panes in the upper sash

over six in the lower sash; or interesting variations such as six panes over one pane and sixteen panes over one pane.

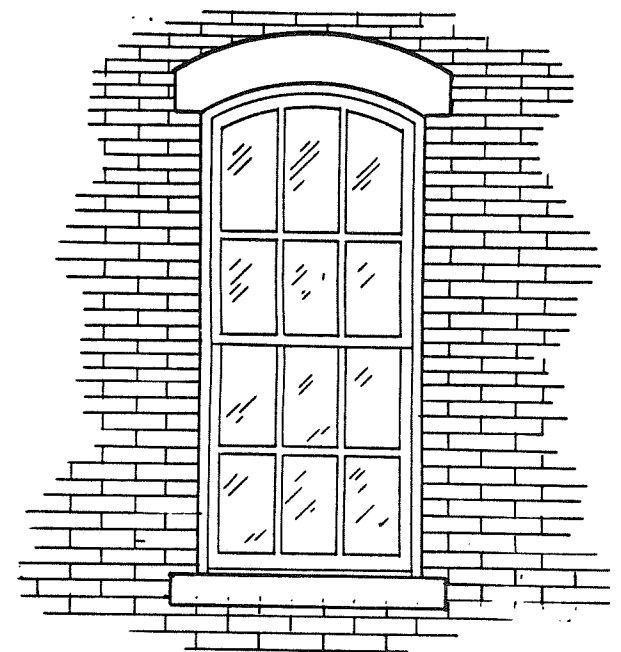


In a few instances, semi-circular window sash are used above rectangular windows. Some homeowners have replaced their original sash with aluminum storm windows, either because the wood sash had rotted or because the old windows were not energy-efficient. Such replacements often alter the appearance of the window in both shape and color, and therefore detract from the overall historic appearance of the facade. Many window frames and sash were originally painted a dark color, which kept them from standing out and drawing attention away from the rest of the building.



Wood moldings applied to the window frames provided decorative detailing, sometimes in conjunction with shallow side brackets in the Eastlake style. Window shutters were originally applied to very few Camden buildings, since they were out of style when most of these rowhouses were built.

A pair of structural members, known as lintels, provide support for the masonry above

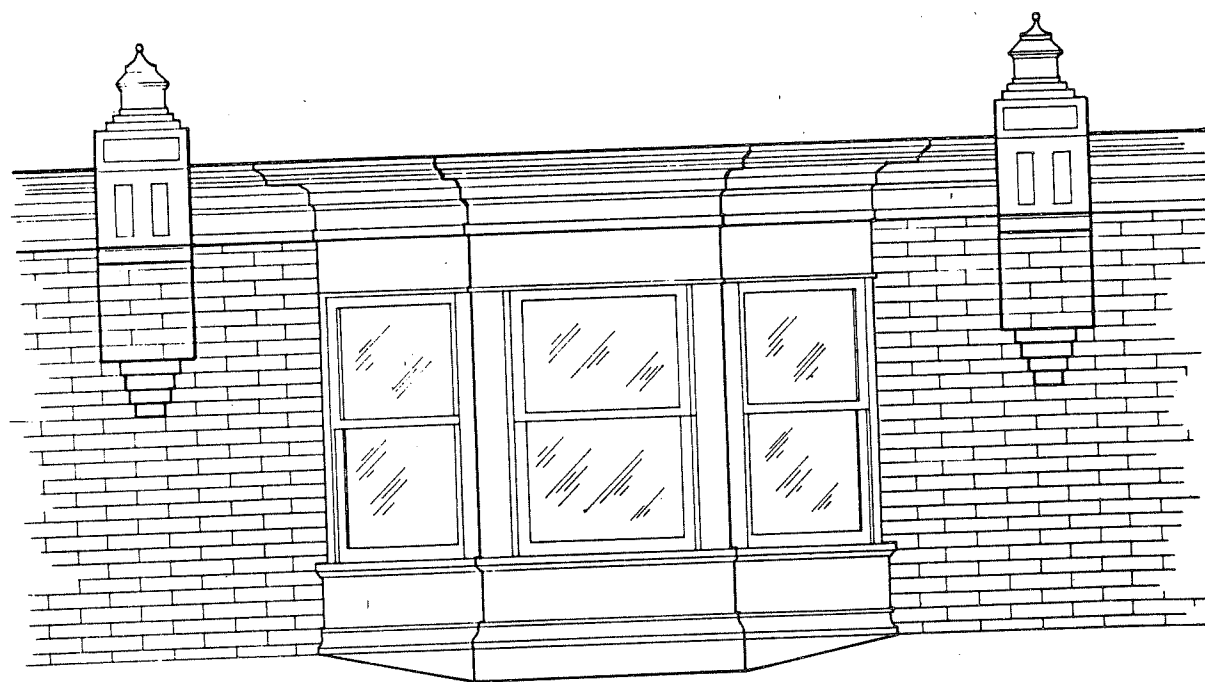
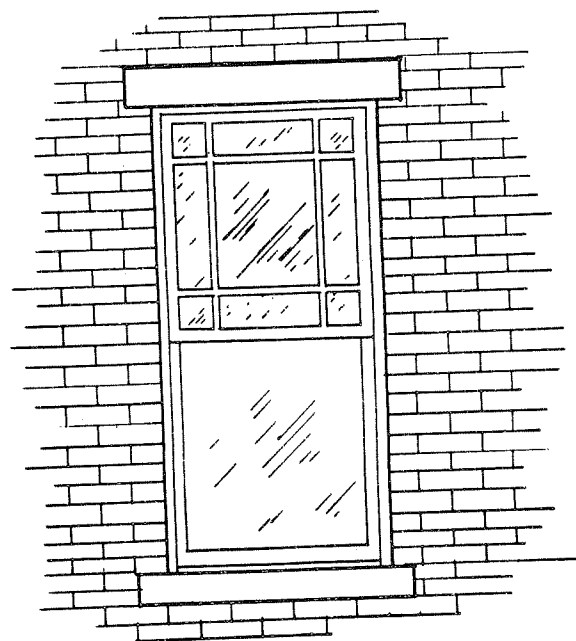


window and door openings. In the Camden rowhouse, the lintels on the interior surface of the facade are usually concealed under the plaster, while the lintels on the exterior of the facade are often exposed to view. These exposed lintels are treated as decorative elements and may be constructed of wood, brownstone, limestone or marble. The same materials are also found in the exterior window sills.

Exterior wood and pressed metal elements are generally painted, both for preservation of the material and for decorative color accents on the facade. Color is an important consideration in the overall architectural appearance of the building. Paint colors that were common during the late nineteenth and early twentieth centuries in the study area are deep, rich colors such as brick red and olive green. White and pastels were not popular. In some instances, the stone decorative elements were also painted sometime after original construction, either to freshen their appearance or in an attempt to arrest deterioration.

Dormers and bays frequently have elaborate wood and pressed metal decoration, including cornices, brackets, molded trim and sheathing. They were usually painted in colors to

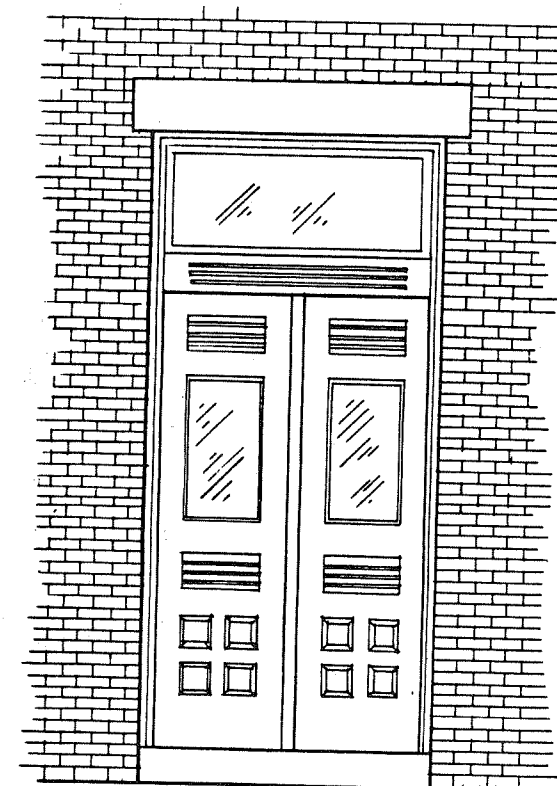
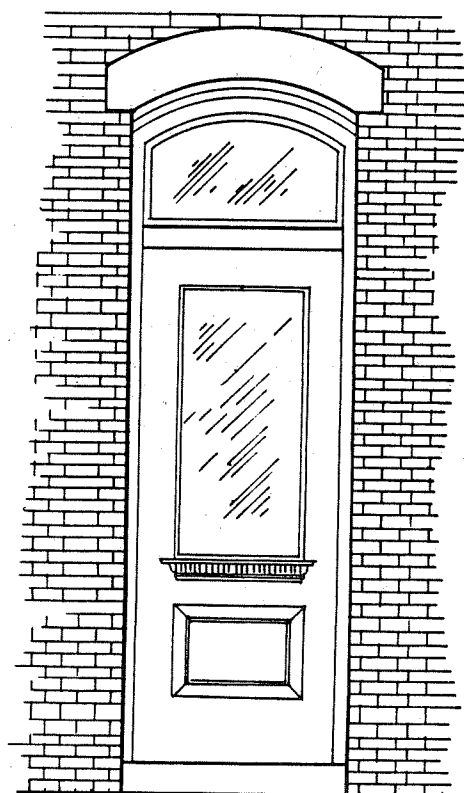
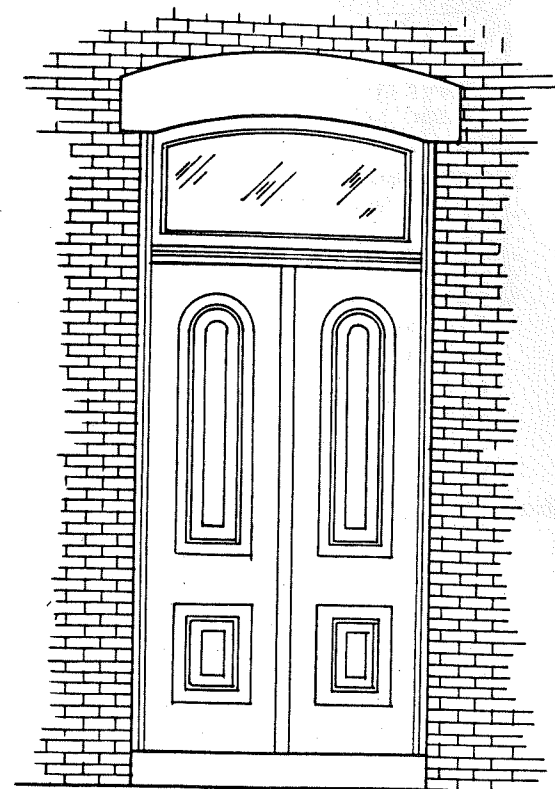
complement the rest of the facade. Some larger bays in the study area are later additions intended to embellish and enlarge a relatively simple original building.



DOORS

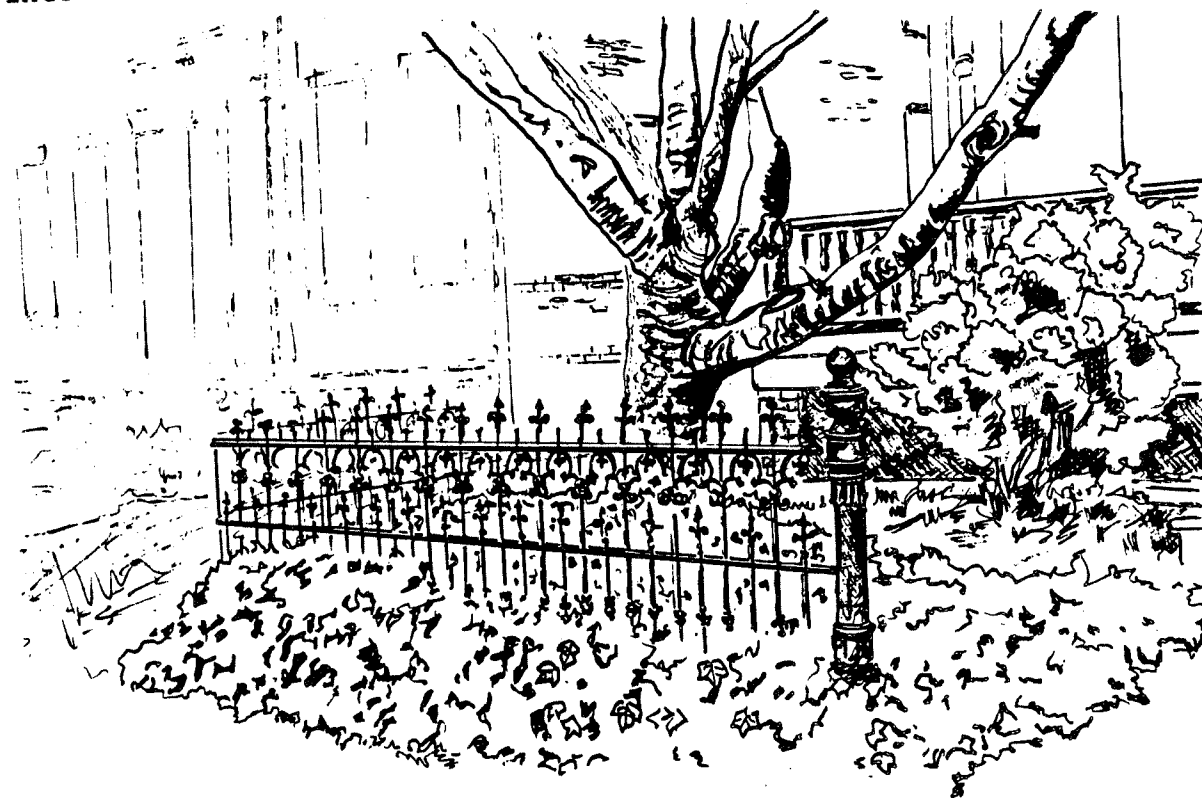
The doors of the study area's rowhouses reflect the prevailing tastes in architectural detail present in the late nineteenth and early twentieth centuries. As shown in the accompanying illustrations, typical characteristics of the doors of that period include:

- . overall verticality in design
- . frequent use of double doors
- . overhead glass transoms
- . the use of raised wood panels and moldings to create patterns
- . the extensive use of glass panels



SITE FEATURES

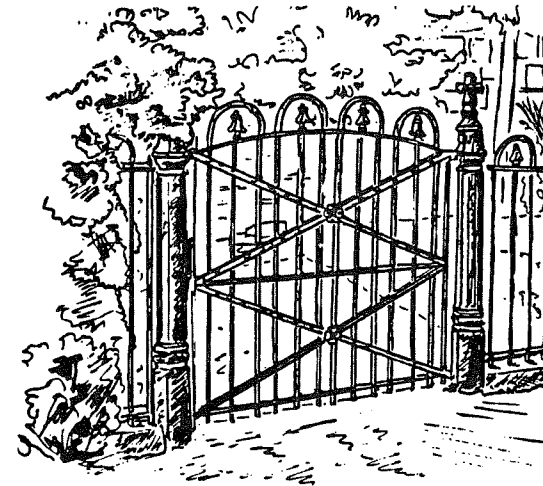
The predominant site feature found within the study area is the front yard or garden enclosed by ornamental wrought iron fencing. Such front yards are found throughout the area accompanying a variety of buildings, from the high style Camden Free Library on Broadway to relatively modest rowhouses. The wrought iron fencing, which was locally produced by foundries in Camden and Philadelphia, is remarkable not only for its beauty and variety, but also for its durability. The preservation of these original site features in front of many of Camden's homes contributes significantly to the historic quality of the neighborhoods and provides an opportunity for the introduction of greenery into the area.



. 546 Stevens Street

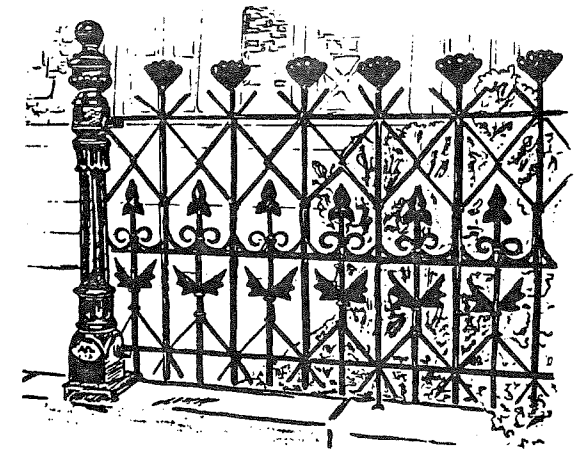
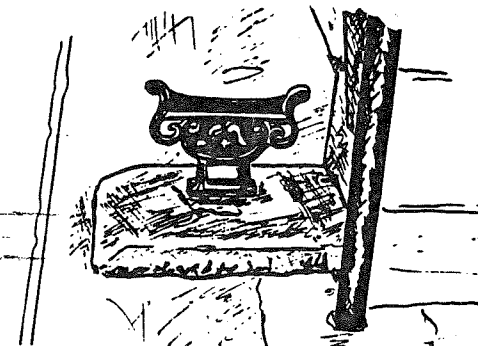
The basic elements of the wrought iron fences are the sturdy posts, which are anchored into the ground, and the more delicate stretches of balusters and rails which are connected to the posts. As shown by the accompanying illustrations, the configuration of the posts varies from stocky to slender. They are often capped by balls, spears, urns or symbolic elements, such as the crosses which cap the fence posts at St. John's Episcopal Church on Broadway. The connecting fences range from simple rows of round arched "hair pins" to complex combinations of hair pins, spears and floral ornaments. Gates are generally marked by a diagonal cross-piece with a center medallion -- usually a flower, but in at least one instance a lion's head at the Camden Free Library.

Wrought iron is the predominant material of other site features present in the study area. Houses which lack a front yard may nevertheless have an iron railing leading down their front steps. Like the iron fencing, these railings usually have thin, delicate pickets and some combination of spear-shaped finials and floral ornamentation.



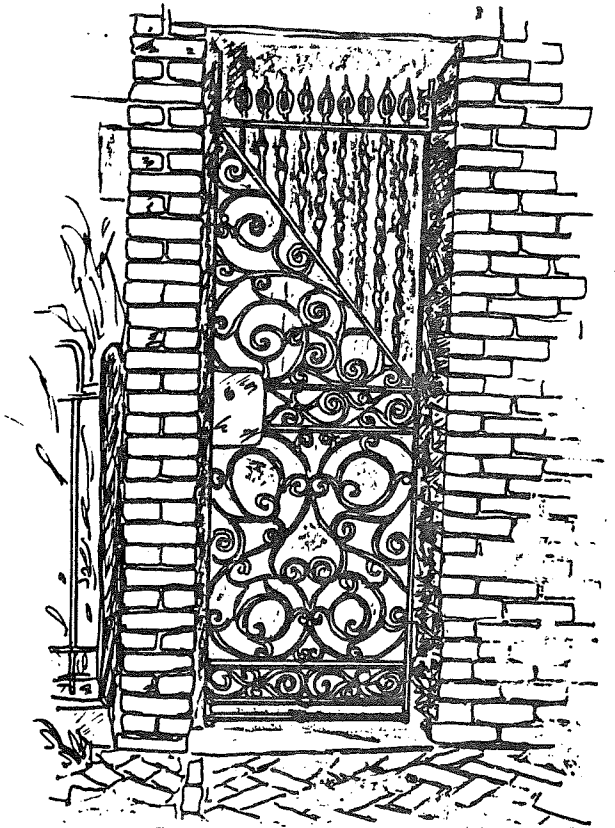
. St. John's Episcopal Church

As shown in the accompanying illustration, some houses within the area retain their nineteenth century "bootscrapers." These were usually located next to an entrance, and were useful in removing caked-on mud from shoes before entering the house. The bootscraper pictured in the illustration is located on Royden Street.



6th and Berkeley Streets
Ronald McDonald House

A number of the rowhouses located within the area have narrow alleyways leading from the front of the house to the back yard. While many of these are closed off with plain wood boards, others feature ornate wrought iron gates. The iron gate illustrated here is located at 532 West Street.



PRESERVATION GUIDELINES

The following section is intended to assist the homeowner in identifying common problems that he may find in his Camden row-house. It suggests approaches to solve those common problems in a manner that is sensitive to the house's historic character.



A CHECKLIST: THINGS TO REMEMBER WHEN YOU FIX UP YOUR CAMDEN ROWHOUSE

Choosing a Contractor

When your home needs renovation, repairs, an addition or painting, always get more than one estimate from contractors for each job. It is important to make your exact requirements known to each contractor, so that the prices you get are for exactly the same work. The contractor's estimate should contain "the scope of work" he plans to do. Getting more than one estimate allows you, the homeowner, to choose the contractor who meets your needs, and the price that is in line with your budget.

Signing a Contract

After you select your contractor, make a written contract with him. Take a few days to read the contract carefully before you sign it. The contract should cover the following items:

- . The cost and quality of materials
- . The "scope of work" to be done
- . The total cost of the job, including time, materials and labor
- . The amount of time the contractor expects the job to take
- . The final completion date of your job

Never pay completely for a job in advance. A small down payment may be requested by the contractor at the beginning of the job to assist in covering his cost of materials for your job. A payment schedule should be worked out based on the amount of work completed, not on the amount of days the contractor has worked. This payment schedule will help insure that your contractor will not leave the job before it is finished.

Obtaining a Building Permit

Make sure that your contractor gets a permit from the city for any work he is doing in your house. A building permit requires that the work will be done according to the city's laws and building codes. Building codes and building permits protect you and your home.

Insurance

Ask to see your contractor's insurance certificate. Check the date to see that it is current. It is important that your contractor have insurance in case anyone is hurt on your job.

Inspection Before Purchase

If you are planning to buy a house, have it checked by an architect or engineer. These professionals can evaluate the building's structural soundness, and its heating, plumbing and electrical systems. A modest fee for this service, before you purchase a house, can save you from unexpected and costly improvements after you own the building.

Working With Architects and Engineers

Architects can help you to assess and plan for any changes you wish to make. A master plan can be drawn for your project by an architect, who will then help you decide on a schedule of improvements. The master plan will allow you to work one step at a time in an orderly sequence.

Always consult an engineer or an architect if you are planning to take down walls, enlarge window openings, or make any other structural changes in your house. The floor above may rest directly on the wall that you want to tear down.

Consult with the Historic Review Committee

If your house is in Camden's Historic District, discuss any changes or alterations with the District's architectural review committee. The members of the committee will help you to make your plans in accordance with the Historic District's design guidelines. Going to the review committee before you start work will help you avoid costly mistakes.

MASONRY CLEANING AND REPAIR

Masonry walls may be built of brick, stone, concrete, concrete block or tile. Some homeowners feel that their masonry buildings are dirty and would like to clean them. However, certain questions should be asked and answered before a building is cleaned.

Is your building really dirty?
Perhaps what appears to be dirt is really the patina of age and the effects of weathering on your building. If you try to clean these from your building's surface, you may actually remove part of the masonry surface.

If your building is dirty, is there any reason to think that the dirt is having a harmful effect? Abrasive cleaning procedures like sandblasting and harsh chemicals may be more dangerous to your building than the dirt already on it.

Will cleaning the building remove the look of age that you found so attractive when you first bought your building?
If so, there is no way to replace that look once the building is cleaned.

If you decide to clean your masonry building, remember that only the gentlest cleaning method should be used. Also, remember that a qualified contractor is better equipped to handle your job than you are as an inexperienced lay person.

Never sandblast a building to clean it! Sandblasting removes the outer protective skin of the masonry and exposes the softer inner portion of the masonry to air and water. The inner portion will not be protected, and the masonry will erode, losing its strength and watertight property.

The gentlest cleaning method is a low pressure water wash. This is done with a garden hose and

a natural bristle scrub brush. This method should first be tried on an unobtrusive area of your building to see if this cleans the masonry. A second method is using a mild detergent with the garden hose and natural bristle scrub brush.

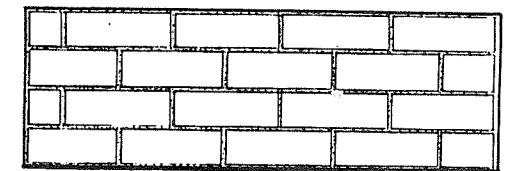
Chemical cleaners contain harsh substances that can erode masonry. Chemical cleaners are also dangerous to use, and can cause lasting damage to skin and eyes. It is important that the cleaner used is appropriate for your type of masonry. The directions on the label of the cleaner should be carefully followed. Rubber gloves, eye goggles and other protective clothing should be worn by those doing the work.

Finally, remember that if your building is two or three stories high, a safe way should be developed for cleaning the highest part of your building before you clean the lowest part. Often a ladder will not reach high enough, and a scaffold will be necessary. If scaffolding is needed, it adds an extra element of expense to your project.

Think carefully about cleaning your building. Perhaps it does not need a cleaning as badly as you thought it did. If you do decide to proceed, talk with several reliable contractors and get several estimates. Discuss the pros and cons of the cleaning method suggested and be satisfied that you are on the correct course before you sign a contract.

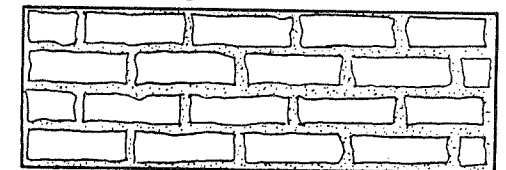
Some contractors may suggest using a waterproof or water-repellent coating after your building is cleaned. Water-

proof coatings are not recommended because, while they may keep water from entering the masonry wall, they may not allow moisture to evaporate from behind the coating. This can lead to a buildup of moisture in the wall, which in turn will cause damage to interior walls and their finishes. Water-repellent coatings may not seal the surface of the wall to water vapor. If vapor condenses into water in the wall itself, it can also cause damage to interior walls, as well as the exterior surface.



. Properly pointed brick

The most common repair for masonry walls is the repointing of the mortar joints between the bricks or stones. This must be done very carefully to avoid damaging the brick or stone. Ideally, the mortar should be removed by hand raking the joints. It is im-

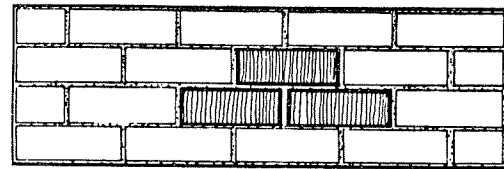


. Improperly pointed brick

portant to duplicate the old mortar in strength, composition, color and texture. Mortar should not be too hard (i.e., contain too much portland cement), because it will cause the old bricks to crack. The new mortar joints should duplicate the old mortar joints in width and profile. This insures a uniform look in the

building's facade. If new bricks are needed to replace old damaged bricks, they should be matched carefully to the old bricks. Many brick manufacturers carry a line of bricks that duplicate the size, color and texture of nineteenth century bricks.

Remember, putting stucco or a fake stone over your nineteenth century brick walls will change



. Improperly matched brick

the look and character of your house forever. Preserve your brick walls instead of covering them with new materials. Damaged stucco should be replaced with new stucco that matches the original in strength, composition, color and texture.

Pieces of marble and brownstone that are used as window lintels, window sills and steps may have been damaged over the years. Marble and brownstone can be patched or completely replaced with new marble and brownstone. If the replacement of these materials proves to be too costly, cast stone tinted to the appropriate color is a good replacement material. However, every effort should be made to preserve the original materials whenever possible.

WOOD REPAIR AND REPLACEMENT

Wood is a versatile and durable material which, when properly

maintained, can have a long and useful lifespan. When problems do occur, certain steps should be taken to determine the right solution. Two aspects of any given solution which will often be in conflict are preserving the building's original character and doing the work for a reasonable cost. With a little effort and forethought, a proper compromise can usually be reached.

Finding the Source of the Problem

The first step to be taken on any project is to identify the problem and find out why it exists. Usually the reasons are clear. The source is either water, insects or both.

Rainwater drainage systems in Camden rowhouses can be either simple exterior gutters and downspouts, or a more complex system of drainage built into the walls of the building. In either case, they should be checked over carefully to see if they are leaking and saturating wood elements. Often, simple blockages in the gutters or downspouts can result in enormous damage to a house.

Insect problems often (but not always) occur together with water problems because insects often infest moist wood. When this is the case, two separate solutions will be necessary to assure that the problem has been fully corrected. Evidence of insects generally comes in the form of their byproducts: look for sawdust, trails of dirt in the wood, or eggs and larvae.

Correcting the Problem

Once the source of the problem has been eliminated, the problem itself can be addressed. If the problem is in a structural member (part of what holds the building up), the alternatives are going to be very different from those for decorative elements (doors, windows, etc.), or ornament (cornices, porch railings, etc.). Generally speaking, however, there are different levels of repair for any type of job.

If a non-structural element has not rotted completely through, the deteriorated portion can be removed and patched with a wood filler, or with a new section of wood called a "dutchman."

If the element has deteriorated beyond the point where it can be patched, replacement may be necessary. If this is the case, always consider replacement with the same or a similar material. When this is not possible, either because of expense or unavailability, choose an alternative that respects the building's original character. Try to determine from the surrounding areas what the original appearance was. Often the original feature can be closely or exactly matched with machined pieces from a lumberyard. However, in architectural features which are critical to the architectural character of the building, it may be necessary to have replacement parts custom made by a wood planing mill. When replacing elements which are prone to rotting, such as structural or decorative elements close to the ground, or where water collects, consider using pressure-treated wood

which has a much longer life-span.

If the problem is with a structural member, such as a floor joist, roof rafter, or wall stud, replacement of that member may be necessary. Often it is possible to leave the deteriorated member in place and add a new member alongside it, making sure it is firmly supported at the ends (in the case of rafters and joists) and at the top and bottom (in the case of studs or columns).

METAL CLEANING AND REPAIR

Generally the metal elements in Camden rowhouses that need the most attention are the gutters and downspouts. There are, however, many other metal elements that make these houses architecturally distinctive, such as the pressed metal found on cornices, bay windows and porches, and the cast iron found in porch columns. A third type of metal, wrought iron, is found in fences and grille work.

Most metals suffer from rust and corrosion when they are not properly protected from water and environmental pollution. Corrosion is also caused by a chemical process called galvanic action that occurs when two dissimilar metals are placed in contact with one another. Metals that can and cannot be in contact with one another are determined by charts called galvanic series. Always consult these charts before putting different metals next to one another, such as in roofing or flashing.

The pressed metal used on Camden rowhouses is usually tin, zinc or galvanized iron. These metals are soft and can be harmed by abrasive cleaning methods. If cleaning or paint removal is necessary, chemicals which will not pit or abrade the surface of the metal should be used. If the metal needs to be patched, the replacement material should be the same as the original. After cleaning and patching, the surface should be painted with an appropriate paint made especially for the type of metal you are dealing with. These paints are available in hardware and paint stores.

Cast iron and wrought iron can be cleaned by hand scraping and wire brushing to remove old paint and rust. After cleaning, the iron should be repainted to protect it from the effects of weather and pollution.

Remember that the decorative metal elements on a house give it its distinctive style and architectural character. These elements should always be preserved. If the metal element is corroded beyond repair, it is often possible, and certainly desirable, to replace it with elements that will duplicate the design of the original. Ornamental metal work can be duplicated by modern craftsmen, so that the authentic details of the house will not be lost.

Gutters and downspouts should always be kept clean and in good repair. If a downspout needs to be replaced, make sure that you replace it with a metal that is compatible with the other metals in your drainage system. The replacement down-

spout should be round and not made of corrugated metal. The round shape is in keeping with the original metal downspouts used on Camden rowhouses. Downspouts were often painted to match the color of the building's walls making them unobtrusive.

PAINT

Painting is an important step in the maintenance and repair of a house. It is a decorative process, but more importantly, it protects the wood beneath it. Paint that is properly applied will serve as an effective shield for at least five to eight years, while a poor application may begin to fail almost immediately, creating conditions which are both unsightly and harmful to the building. Nevertheless, with a little care and extra attention to detail, this can be a good project for a homeowner.

Surface Preparation

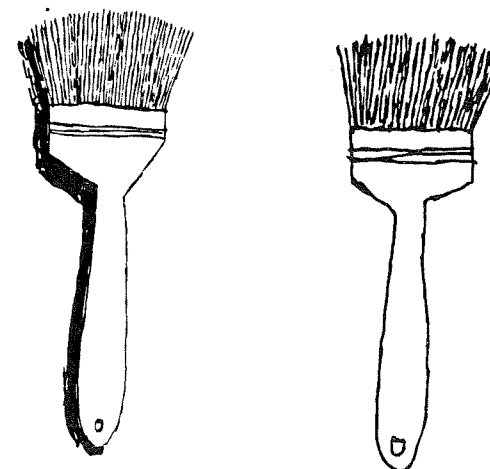
This is always the most important step of the job. If the surface has not been prepared well, the paint will not adhere and will probably begin to peel soon after being applied. Choose tools carefully. Scrapers of different size and shape will be needed for all of the hard-to-get-at places. Be sure to have a metal file handy to keep the scrapers sharp. Once they become dull, it is much easier to gouge the wood beneath the paint.

Paint that is difficult to remove manually can be treated in a variety of ways by professional painters. One method

is the heat gun, a tool resembling a hair blow dryer which works on the same principle. Hot air is passed over the surface, loosening the paint from the wood. Other types of heating tools like a blow torch present serious fire hazards and should not be used. Many old house paints contain lead which creates noxious fumes when heated.

Chemical strippers work well, but only under certain conditions. For thick coats, repeated applications are often necessary; vertical surfaces are always more difficult because the stripper tends to run off before it softens the paint. The chemicals are also extremely toxic and should be used with caution; any contact with skin can cause severe burns.

After all the loose paint has been removed, the surface should be sanded with an abrasive paper. This will smooth out any rough edges and make it easier for fresh paint to bond with it. Orbital and belt power sanders work well on flat surfaces, but hand sanding is always necessary for corners and rounded areas.



Paint Application

The first step in paint application is the undercoat or primer. The purpose of this coat is to seal the wood so that it will not absorb the finish coat. Normally only base wood needs priming since painted wood has been sealed already. The exception to this is when the paint type is being changed, as from oil-based to latex paint.

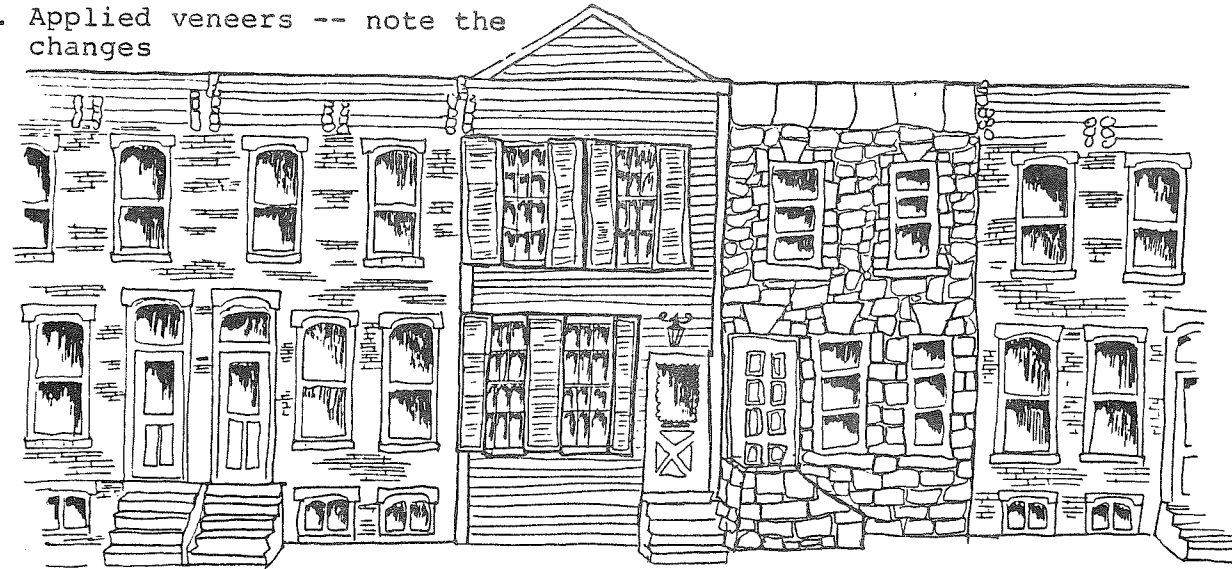
After all bare wood has been primed, the finish coat can be applied. Choice of paint brushes is important for any job and cheap brushes should be avoided. There is always a reason for the difference in price of brushes which at first glance appear to be identical. China bristle brushes are recommended for use with oil and alkyd paints. These brushes, when properly cleaned with mineral spirit solvents, will last indefinitely.

Choice of color for a given paint job should not be taken lightly. This decision will have an immediate impact not only on the house itself, but also on the neighborhood as a whole. It may be wise to check with the Historic Review Committee to find out which colors would be appropriate.

VENEERS

The term veneer applies to a covering which has been placed over an original facade. Veneers include vinyl or aluminum siding, stucco and imitation stone or brick facings. These are basically modern materials which were not available at the time Camden's rowhouses were built, but which have been installed with the idea that they

- . Applied veneers -- note the changes



may improve or "freshen up" the appearance of an old house or act as insulation.

The problems with veneers are: they very often destroy the original historic and architectural character of an old house; they seldom are effective as insulation; and they often cause long term maintenance problems for the homeowner. Veneers that imitate materials other than the originals will make the scale of the house seem awkward and out of place with its neighbors. Veneers over original brick or stone will not be permitted in the historic district. If the exterior wall must be covered, a better way to preserve the original appearance of a house and the rhythm and continuity of the block would be to use paint. More important than appearance is the physical damage that is caused by applying the veneers. They are often nailed to the surface beneath, creating holes through

which moisture can enter. Any moisture trapped behind the veneer may remain inside the walls, causing moisture problems both within the wall and on paint and wallpaper inside. Moreover, siding installers will often cut off original decorative details to make a smoother surface for their work. Even if the building is not seriously marred, the original details that make each building unique and interesting to look at are usually lost for good.

Veneers generally do little other than alter a building's appearance. Most important, and contrary to popular belief, aluminum and vinyl sidings do not provide any extra insulation. They have vents, allowing cold or hot air to circulate freely. Second, veneers are not a substitute for maintenance. Instead, they can create serious structural problems. They prevent later inspection, and the hidden problems can

grow worse until major repairs are necessary.

ENERGY CONSERVATION

Rowhouses, because of their nature, benefit from having houses on either side of them. Having only the front and back sides open to the weather helps to keep heating costs down. The cost of energy can also be lessened by following these guidelines:

- . Install thermal insulation in attics and unheated cellars.
- . Weatherstrip doors and windows.
- . Install storm windows with air-tight gaskets and ventilating holes, to insure proper maintenance and to avoid condensation damage to your original windows. Storm windows installed on the interior have the added advantage of not obscuring your original windows from the outside, thereby having little impact on the architectural integrity of the facade.
- . If you should choose exterior storm windows, make sure that the color of the window frame matches the color of the rest of the trim on your house.
- . Maintain the built-in energy conservation features of your rowhouse, such as vestibules and porches.
- . If you choose to have a storm door, try to find one that

does not obscure your original door's historic features.

- . If your house has original interior wood shutters, maintain them since they are quite effective in keeping cold air out of your home.
- . If your home originally had awnings, replace them, as awnings are an effective way of keeping the sun's heat out of your home during the summer months.
- . It is important to remember that exterior vinyl and aluminum siding may not increase your home's energy efficiency.
- . If you install a solar energy system, place the solar collectors on the roof, where they will not be seen from the street.

ROOFS

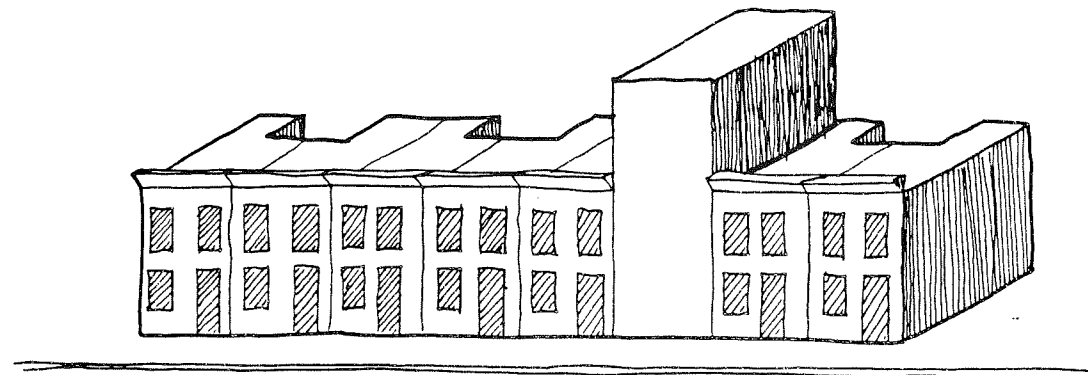
A roof is a watertight cover for your home. All leaks should be fixed as soon as possible so that major damage does not occur to the interior of your house. Regular roof maintenance and repair may help to avoid the necessity of completely re-roofing your home, as well as repair of interior structural and decorative elements.

A slate roof can be patched with new slate tiles. A new slate roof is very expensive, but there are roofing materials that imitate the look of slate, and which are less expensive than slate.

CHIMNEYS

Chimneys that are used for oil heat and for wood stoves should be cleaned once a year for safety. Places where chimneys pass through wood floors and the roof should be checked to see that they are not leaking fumes or heat. Be sensitive to odors in these areas, so that fires and exposure to toxic fumes can be avoided. Do not attach more than one heat source to a single chimney

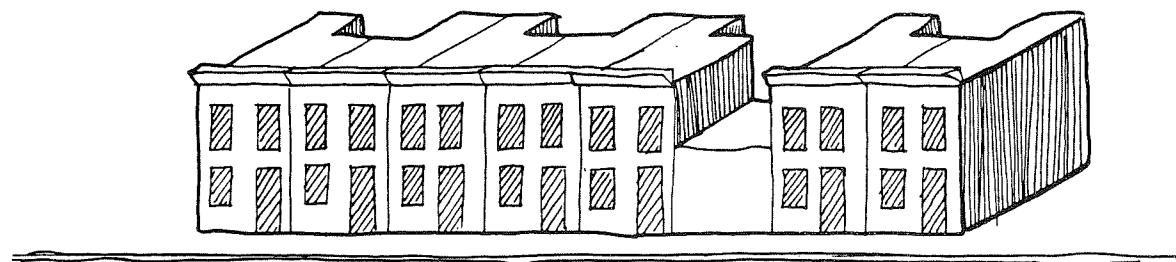
flue. Two heat sources in a single flue can cause a back-draft which can result in a fire or carbon monoxide poisoning. The top of your chimney should always be higher than the highest part of your roof; the chimney will not draw properly if it is lower than the ridge of your roof line. Have the bricks on your chimney inspected regularly and re-pointed, both for the chimney's stability, and to avoid air and water leaks.



INFILL DESIGN

When you plan infill housing, make sure that your roof line

is compatible with the roof lines of adjacent houses.

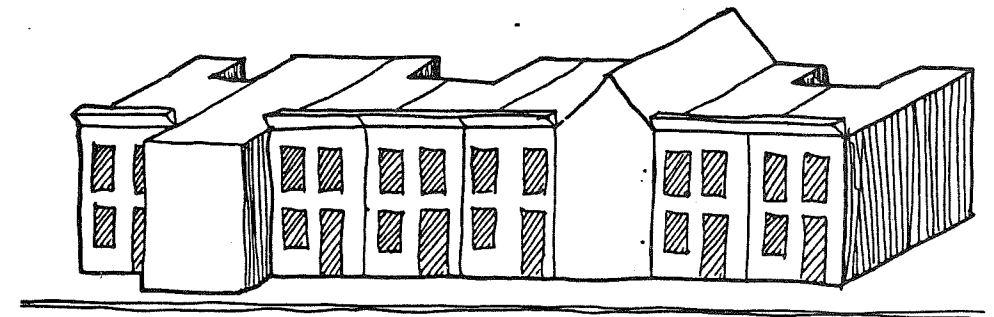


A one story building in the middle of a row of two story

buildings breaks up the rhythm and the symmetry of the row.

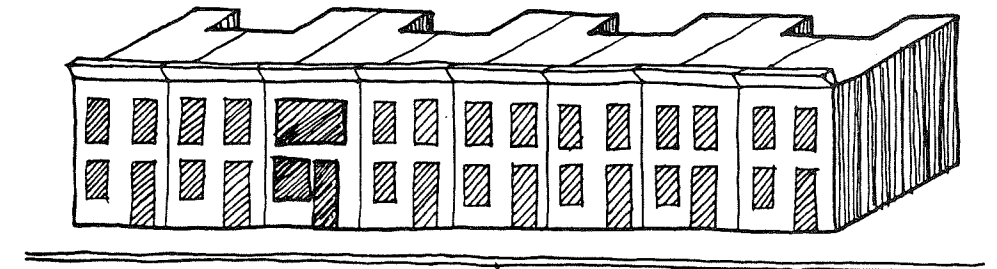
Infill housing should not project in front of the other houses in the row. The roof

pitches on adjacent houses should always be compatible.



Windows are an important ingredient in the architectural symmetry of rowhouses. Changing

window shapes disturbs the rhythm and the symmetry of row-house blocks.



STRUCTURAL STABILITY

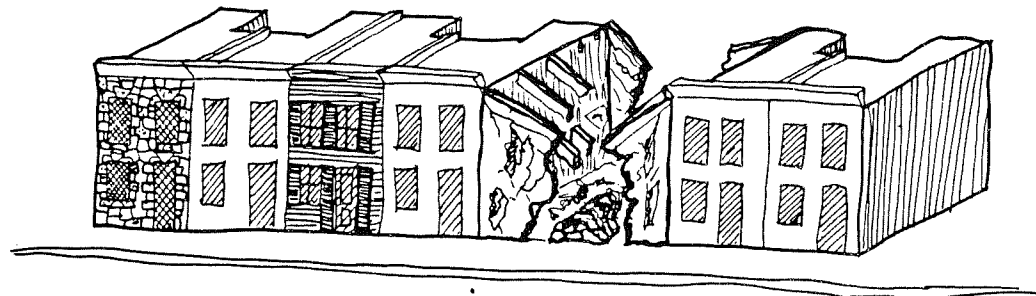
Many things affect the stability of your Camden rowhouse. Engineers and architects should be consulted for the following problems:

- . Exterior walls that bulge
- . Large cracks in exterior or interior walls
- . Wet basements or basement walls that have large cracks or other damage
- . A house that has been damaged by fire, water or vandalism
- . A rowhouse where one or both of the houses on either side has been demolished or severely damaged. The stability of a rowhouse may depend on the other houses in the row, and exterior walls may need reinforcing.
- . If a lintel is cracked or seriously deteriorated, it can cause the wall above to sag and even collapse. This condition should be corrected immediately.

In addition, always make sure that the exterior party walls of your rowhouse rise above the level of the roof. These

walls act as a fire-break to keep fires from travelling from house to house. If these walls have been torn down to the roof line of your house, it is important to replace them.

Never demolish a party wall. The result will be a collapsed house and a pile of rubble. Always consult an architect or an engineer before you begin structural renovation.



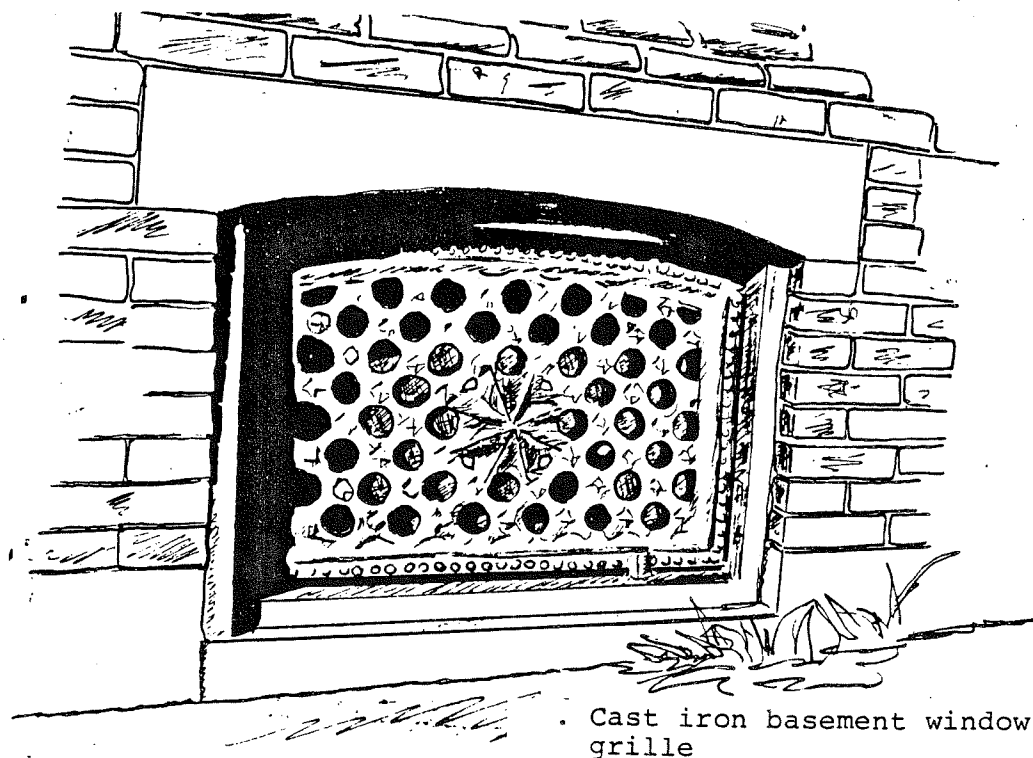
SECURITY

Protecting your home from burglars and intruders should be a top priority regardless of where you live. However, in undertaking security measures, every possible effort should be made to minimize alterations to the historic character of your house. Set forth below

are some recommendations for making your house secure while preserving its historic integrity.

Iron Bars, Grilles and Gates

The use of iron bars, grilles and gates over the windows and doors of your house can destroy its historic character, as well



. Cast iron basement window grille

as make it look more like a fortress than a home. Such security devices are not recommended. As discussed below, there are various alternative measures which may obviate the need for iron bars or grilles. If you believe that you nevertheless need the extra security which these devices provide, you should place them on the inside of the opening which you wish to secure. This not only minimizes their impact on the streetscape, but also makes it more difficult for a determined burglar to detach them.

Two places where the use of iron grilles or gates may be appropriate are over basement windows and at the front entrances of alleyways. Many of the area's houses retain their original decorative basement window grilles. The window grille illustrated here is attractive while providing security. An illustration of an attractive gate for an alleyway appears in the section of this book dealing with site features.

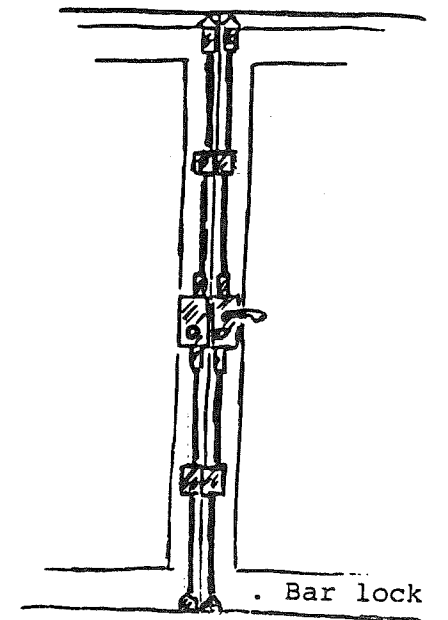
Doors

If your house retains its original solid wood door, the door itself will provide a measure of security. Your primary concern will therefore be that the locking devices are adequate. An ordinary spring latch lock offers very little security because it can be easily picked or opened with a plastic credit card. You should invest in a strong deadbolt lock, whose bolt extends at least three quarters of an inch into its strike. The strike should be attached

to the frame with long, non-removable screws.

Many of the original doors on the area's houses have glass panels. This is a useful feature because it permits you to see who is at your door before opening it. The major drawback of glass panels is that an intruder might break the glass, reach in and unlock the door. This risk can be reduced by installing a sheet of unbreakable plastic or safety glass on the interior side of the glass panel. If your door is missing its glass panel, you may want to consider replacing it with safety glass.

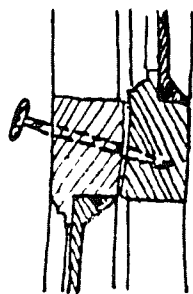
Double doors, which are an original feature of many of the area's rowhouses, are vulnerable to being kicked in. At least one of the doors should be anchored firmly by bolts at both top and bottom. For additional security you may want to invest in bar locks which provide for a series of deadbolts, including ones which go into the top frame and into the floor.



. Bar lock

Windows

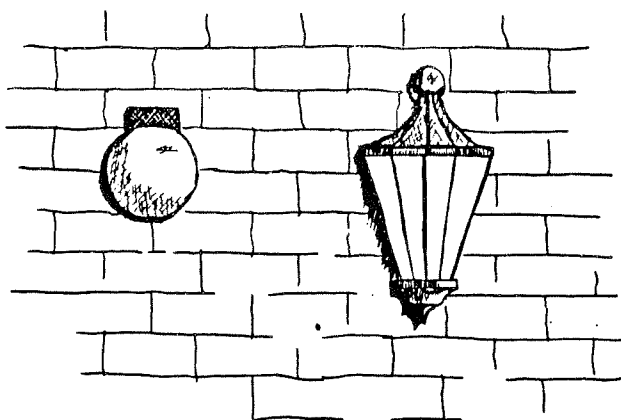
Most of the houses in the area have typical late nineteenth and early twentieth century one-over-one or two-over-two pane double hung windows. Consequently, the homeowner should be concerned about intruders gaining entrance by either forcing a window open or by breaking it. The best protection against an intruder forcing a window open is a combination of a key controlled window latch and the use of window "pins." The window latch should be secured with nonremovable screws. A window pin can be made by drilling a small hole on a slightly downward angle through the inside sash and through three quarters of the thickness of the outside sash. Nails are then inserted into the holes, preventing the sash from moving. Interior storm windows provide an additional line of resistance if an intruder breaks through the glass or succeeds in opening a window. Extra security is achieved if the storm windows are made of an unbreakable material.



. Pinned window

Exterior Lighting

A house, including the porch and front yard, should be well lighted so that a prospective intruder can be readily seen. Since outdoor lighting was not an original feature of most of the houses in the area, an effort must be made to provide the necessary light without destroying the historic integrity of the house. The preferable place for a lighting fixture would be on the porch ceiling, where it can throw off the necessary light without being visible from the street. If the fixture must be in a visible position, select a style which is simple and unobtrusive, rather than a "colonial" or other decorative design which will be inappropriate for the period of the house.



. Acceptable . Unacceptable

Additional Security Measures

There are many additional security measures that will have no adverse impact on the historic fabric of your house. These range from putting lights

and radios on timers to remembering to lock your doors. You should consult your police department for additional security information.

MAINTENANCE

Maintenance is primarily a matter of protecting the building materials from damage by the weather and making sure that anything that breaks or wears out is replaced promptly. Consistent and alert maintenance is almost always cheaper than having to make major repairs and replacements later. The most important things to remember are:

- . Keep gutters clear of leaves and debris so that water can drain quickly. Make sure drainpipes are free of leaks and that they discharge water clear of the house so that masonry and wood are not saturated with water.
- . Repair any holes in the outer walls immediately to keep moisture out of the walls. Replace any flashing that comes loose.
- . Keep vents under the eaves clear.
- . Make sure that materials that need protection, such as wood or soft brick, are always painted.
- . Replace broken or rotted elements promptly with items as similar as possible to the original.

. Inspect the roof regularly. It is usually possible, and much better, to repair the actual source of a leak instead of replacing the roof. Neglected leaks can lead to a chain reaction of water penetration in the building, causing widespread damage that is hard to repair.

- . Clean and inspect chimneys regularly. Debris in the flue can block ventilation and cause dangerous fires.
- . Install smoke detectors and make sure they are always in working order.

INTERIOR RENOVATIONS

A new homeowner may envision changing the interior of the rowhouse to better suit his needs. Always consult an architect or engineer before tearing down any interior walls. The wall you want to tear down may be carrying the load of the floor above it, and that wall is necessary to the structural stability of your home. There are times when these walls can be replaced by steel beams, but the beams must be carefully designed and installed to prevent structural damage or collapse. Removing entire floors, or parts of floors to create a room with a cathedral ceiling should always be planned by a professional architect or engineer. When renovating old bathrooms and kitchens, it is easier and less expensive to leave the existing plumbing lines in place. Old worn fixtures may be replaced with new ones.

Existing electrical wiring should be checked by a licensed electrician. Old, frayed wires can be a fire hazard. New electrical outlets, fuse boxes and greater amperage may be needed when you modernize your home. Improvements such as air conditioning, washing machines, clothes dryers and dishwashers often require the installation of new electrical lines with a greater capacity.

In general, make sure that all the renovations that you plan will enhance your home. Additions such as larger windows, bay windows and exterior decks on upper floors may detract from the original architectural character of your rowhouse instead of preserving and enhancing it.

BUILDING AND ZONING CODES

Building Code. The building code regulates the construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of all buildings and structures. In order to ensure that buildings are safe, it sets standards relating to such matters as the fire resistance of materials; the location, number and size of means of egress (i.e., doors, windows, hallways, stairs); fire protection systems; sanitation, light and ventilation; and electrical wiring.

You must apply for and obtain a building permit before you construct, enlarge, alter or demolish a structure. Ordinary repairs do not require a building permit unless they involve cutting away any wall

or partition (or a portion of a wall or partition), removal or cutting of any structural beam or bearing support, removal or change in any means of egress, a rearrangement of parts of the building which would affect exit requirements, or the addition, alteration or relocation of various systems such as plumbing, sewage, gas, drainage and electrical wiring. You should check with the Building Inspector to determine whether you need a permit before you undertake any work other than very minor repairs.

Some changes which you wish to make may be prohibited by the building code because they reduce the building's safety, such as interfering with exiting in an emergency. A registered architect can assist you in planning major renovations to make sure that your plans comply with the building code.

Since most of the provisions of the building code were written for new construction, there are special provisions for existing and historic buildings. Under certain circumstances, alterations to an existing building may be made with the same materials as the original structure even though the building code would normally require the use of some other material. If your house has been designated an historic building by the state or city, you might be able to obtain an exemption from some of the building code's requirements in order to preserve your house's historic character if the building is judged to be safe and in the interest

of public health. This procedure requires the complete submission of professional architectural and engineering plans and specifications bearing the professional seal of the designer. You should consult the city's Historic Preservation Planner, the Building Inspector and your architect concerning the application of those provisions before you apply for your permit or undertake the work.

Zoning. The City of Camden has a comprehensive zoning ordinance. The Zoning Map of the City of Camden divides the city into districts designated according to what uses (such as residential, commercial, industrial, etc.) are permitted in them. Depending upon the classification of a particular district, the zoning ordinance regulates various aspects of land and buildings, such as use, height, the size of yards or other open spaces, lot size, signs, parking and out-buildings. The ordinance requires that you obtain a zoning permit when you undertake certain alterations, repairs, renovations or additions. Site plan review is required for all new construction other than single and two family structures. Check with the Zoning Officer of the City

of Camden to find out whether you need zoning review for a permit and comply with all requirements before you start your work. Under certain limited circumstances you might be able to obtain a variance which would exempt you from a particular regulation. You can obtain an application form from the Zoning Officer. Although it is not mandatory, an attorney who is familiar with zoning law can assist you in applying for and obtaining a variance.

Historic District Ordinance. If your house is located within a designated Historic District, you must also obtain a Certificate of Appropriateness for any proposed alterations which will affect the appearance of the exterior of the structure visible from the street. Replacing worn out features of your house's exterior with replicas affects its appearance, and therefore requires a Certificate of Appropriateness. Camden's Historic Review Committee will provide recommendations and advice concerning rehabilitation and repairs to owners of property located within designated historic districts. Contact the city's Historic Preservation Planner for details concerning the procedure for obtaining a Certificate of Appropriateness.

GLOSSARY

- baluster - vertical element that supports a railing
- balustrade - a decorative railing with posts
- bearing wall - wall that supports a load such as the floor or floors above
- bracket - diagonal piece, often ornamental, that bridges between vertical and horizontal elements
- brownstone - brown sandstone, often used for lintels, sills and steps in Camden
- cast iron - shaped or patterned iron produced from a mold
- cast stone - imitation stone made by combining actual crushed stone with a cement binder
- column - a vertical structural post
- conductor head - the element which directs water from a roof gutter into a downspout
- corbelled brick - decorative use of brick in projecting layers
- cornice - the projecting edge of a roof, often ornamental, that frequently hides the gutter
- facade - the exposed walls of a building
- finial - a decorative finishing piece projecting upward
- gargoyle - the ornamental spout of a gutter or downspout
- glazed brick - a brick, darkened and glazed by longer baking
- keystone - the central wedge-shaped stone in an arched opening of a window, door or porch. The word keystone is also used to describe wood or metal imitation of real stone.
- limestone - a light gray sedimentary rock used in buildings for walls, steps and decorative elements
- lintel - the horizontal element that supports a wall above an opening, such as a window or door

- mansard roof - roof style, often with dormers that is almost flat on top with steeply slanting sides
- masonry - stone, brick, concrete block or tile used in a building
- metal lath - a mesh that provides a rough backing for plaster or stucco
- molding - decorative wood trim which is applied to give shape to architectural elements, such as doors, windows, porches, cornices, etc.
- monochromatic - of a single color
- mortar joints - the mixture of sand, lime and sometimes cement used between stones or bricks in a wall
- parapet - the portion of a wall extending above the roof
- party wall - masonry wall between two houses
- pediment - a triangular topping for a door, window, porch or building front
- pendant - decorative element that hangs down
- pent roof - a roof that projects between stories of a building
- polychromatic - of more than one color
- portico - a roofed cover over an entrance
- pressed metal - metal with designs pressed into it used as a veneer
- sash - the section of a window that holds the glass and often moves up and down
- sill - the ledge at the bottom of a window or door
- stucco - hard plaster applied to a building exterior
- swag - applied decoration resembling draped fabric or flowers
- wrought iron - iron pieces shaped by pulling and hammering with heat

SUGGESTED FURTHER READINGS

The Secretary of the Interior's Standards for Rehabilitation,
U.S. Department of the Interior, National Park Service, 1983

Office of Cultural Programs
Mid-Atlantic Regional Office
National Park Service
143 South Third Street
Philadelphia, PA 19106

Preservation Briefs, Technical Services Division, National Park
Service:

- #1 The Cleaning and Waterproof Coating of Masonry Buildings
- #2 Repointing Mortar Joints in Historic Brick Buildings
- #3 Conserving Energy in Historic Buildings
- #4 Roofing for Historic Buildings
- #6 Dangers of Abrasive Cleaning to Historic Buildings
- #8 Aluminum and Vinyl Siding on Historic Buildings
- #9 The Repair of Historic Wooden Windows
- #10 Exterior Paint Problems on Historic Woodwork