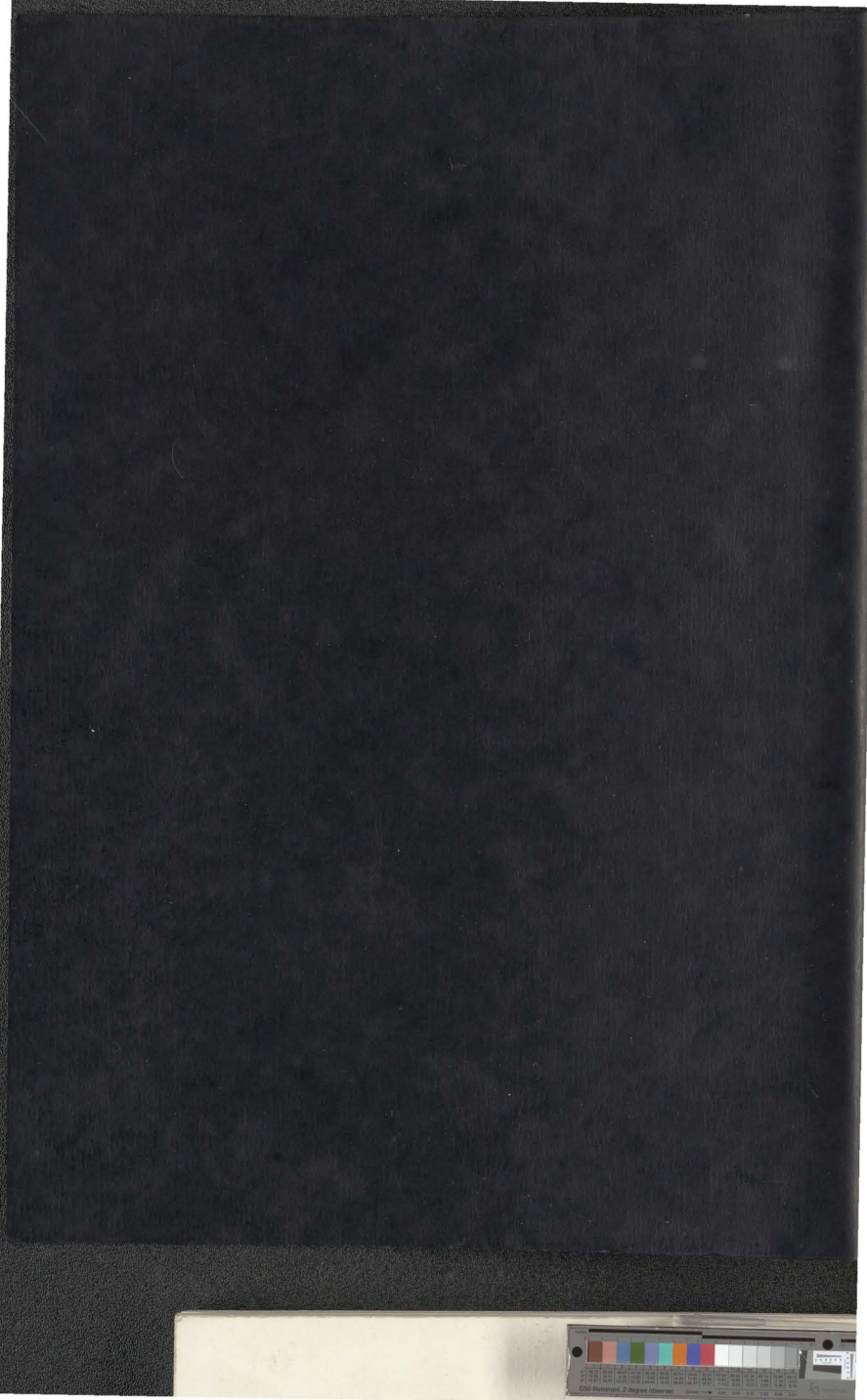


THE GEORGE C. COOLEY COTTAGE
BROWNSVILLE, OREGON
A HISTORIC STRUCTURE REPORT

by
FRANK ANTHONY FIORI

A TERMINAL PROJECT

Presented to the Interdisciplinary Studies Program :
Historic Preservation
(and the School of Architecture and Allied Arts)
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Master of Science

June 1983

APPROVED: Philip H. Dole

Philip H. Dole


D50 Illuminant, 2 degree observer

VITA

NAME OF AUTHOR: Frank Anthony Fiori

PLACE OF BIRTH: Brunswick, Maine

DATE OF BIRTH: March 7, 1950

UNDERGRADUATE AND GRADUATE SCHOOLS ATTENDED:

St. Michael's College
University of Southern Maine
Idaho State University
University of Oregon

DEGREES AWARDED:

Bachelor of Arts, 1973, St. Michael's College
Master of Science, 1983, University of Oregon

AREAS OF SPECIAL INTEREST:

Architectural Conservation
History of Building Technology
Architectural History

PROFESSIONAL EXPERIENCE:

Internship, Gregg Olson, Restoration Woodworker, Eugene, Oregon, 1982.

Coordinator, Idaho State University Oral History Project, Idaho State University, Pocatello, Idaho, 1980-1981.

Lecturer, Department of History, Idaho State University, Pocatello, Idaho, 1981.

Adjunct Faculty, Department of History, Idaho State University, Pocatello, Idaho, 1980.

Research Assistant, Department of Anthropology, Idaho State University, Pocatello, Idaho, 1979-1981.

Field Director, Historic Component of the Idaho State University Anthropology Field School, Department of Anthropology, Idaho State University, Pocatello, Idaho, 1980.

Researcher and Writer, Commonwealth Associates, Inc., Jackson, Michigan, 1979-1980.

AWARDS AND HONORS:

Outstanding Young Man of America, 1982.

ACKNOWLEDGEMENTS

I wish to thank Professor Philip Dole for his invaluable guidance and assistance as my advisor and as chair of my committee. I also wish to thank Professor Art Hawn and Mr. George McMath for their guidance as members of my committee. I would also like to thank Harry Weiss, Christopher Flagg, and Thomas Raley for their help in measuring and analysis, Judy Galvin for her wallpaper study, and John Ogard for his interior paint analysis. In addition I would like to thank Mr. Glenn C. Fisher of the Extension Entomology Department at Oregon State University, and Professor Robert Cramer of the Forest Products Laboratory at Oregon State University for their assistance. I wish to express my gratitude to the members of the Brownsville Restoration Society for their support of this project. I wish to thank my wife, Linda Hill, for her encouragement and support throughout this endeavor.

DEDICATION

To Linda

TABLE OF CONTENTS

INTRODUCTION

The George C. Cooley Cottage, located at 220 Blakely Avenue in Brownsville, Oregon, survives as an excellent example of vernacular Classical Revival architecture in Oregon. The building is presently owned by the Brownsville Restoration Society, a group of Brownsville residents who joined together to purchase the house and save it from almost certain loss. Through their volunteer efforts they hope to rehabilitate the house, thereby assuring its survival and continued use for many years to come.

This historic structure report is an investigation of the Cooley Cottage, its purpose being to determine the past history and use of the building, to examine the present condition of the building, and to make recommendations for the preservation and rehabilitation of the building. The guidelines and recommendations found in this report will be used by the Brownsville Restoration Society in helping them make decisions concerning the rehabilitation of the George C. Cooley Cottage.

The investigation was carried out over a period of several months, from September of 1982 to May of 1983, and was done in two distinct parts; the historical analysis

being done as one investigation, and the analysis of the existing building fabric as the other.

The historical analysis was undertaken to determine the acquisition of the property, ownership of the house throughout its life, construction history of the house, and alterations to the original building.

Several methods were used to carry out the investigation and collect data. These included the search of records in the Linn County Courthouse in Albany, Oregon, search of the records in the Cooley & Co. collection in the Special Collections section of the University of Oregon Library, oral interviews, visual investigation, hand measurement, and analysis of wallpaper layers and paint layer sequences.

The other major investigation undertaken for this project was the investigation and analysis of the existing building fabric to determine the present condition of the house and outbuildings. This analysis was done in order to identify the problem areas, and to make recommendations for repair or replacement of deteriorated materials.

Methods used in this analysis included visual investigation for signs such as water stains, fungul growth, and insect entrance or exit holes which could indicate problem areas; collection of insect samples and frass samples for analysis; probing as a means of determining the soundness of wood and other materials; and collection of wood samples

for identification.

On the following pages are the results of these investigations.

II

HISTORICAL ANALYSIS

Biographical Sketch of George C. Cooley

George Cooley was born in Greyson County, Virginia, July 28, 1831. In 1853 George, and other members of his family migrated to Oregon and settled in Cottage Grove. Later that same year, or early in 1854, George left Cottage Grove and moved to Brownsville, where he found a job working at the general store of Hugh Brown and James Blakely. The first positive record of George Cooley's presence in Brownsville is found in the Brown and Blakely store records, in a March 3, 1854 entry.[1]

George continued to work at the Brown and Blakely store, and in 1857 married Harriet Blakely, the daughter of store owner James Blakely. Over the next few years George purchased the business from his father-in-law, for a while operating the business with a partner by the name of Linville under the name Linville and Cooley General Store. George assumed full ownership of the store at a later date and operated it under the name of G.C. Cooley and Company until 1905 when ill health forced him to retire, and his son, W.C. Cooley, took over the business.

During his lifetime George Cooley built many houses in Brownsville, and was active in business ventures other than his store. Among these was the Brownsville Woolen Mill, of which he was one of the first stockholders in 1861.

The first house owned by George Cooley was a small Classical Revival style house on Blakely Avenue in Brownsville. To differentiate between this house and others that George Cooley built and lived in, this house is referred to as the Cooley Cottage. It was here that George and his wife Harriet lived and raised their family of six children; William C., Carrie, Etta, Kittie (Chrischiana), James, and Emma.

Acquisition of the Property and History of Ownership

The site that the Cooley Cottage presently occupies was part of the public domain of the United States until sometime in the late 1840's or early 1850's, at which time James Blakely settled on a parcel of land (of which the present site is a part), laid claim, and built a house.

A survey map of the area, done for the General Land Office in 1852-1853, shows a building located in the SE¼ of the NW¼ of the NW¼ of Section 6, Township 14 south, Range 2 west of the Willamette Meridian. The building is labeled with the name Blakely (see Figure 1) and is described in the notes of the surveying party as follows:

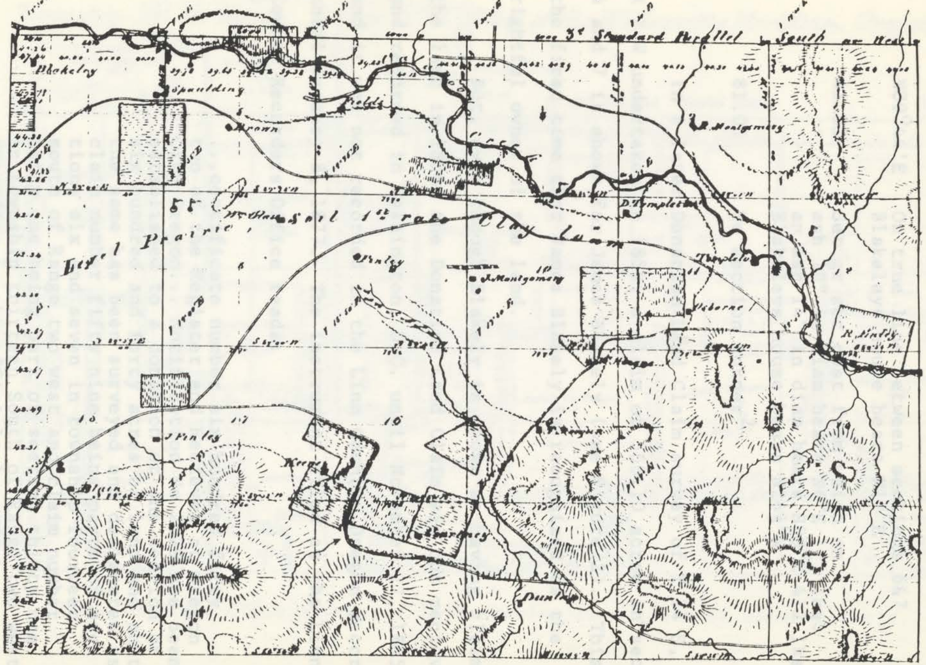


Fig. 1. Portion of General Land Office survey map of Township 14 south, Range 2 west of the Willamette Meridian. Survey, done in 1852-53 shows Blakely house.

On random between sections 6&7.

N89°44'E	On true line between sections 6&7 Blakeleys house bears N12°E
41.05	Set gr sec post from which an ash 10" in diam bears N6°E 171 lks. an ash 14" in diam bears S89°E 412 lks. Blakeleys house bears N24½°W
81.05	To section corner[2]

In a later Donation Land Claim survey of T 14 S, R 2 W undertaken in 1858, a claim of 568.10 acres in sections 6 and 7 is shown for James Blakely (see Figure 2). This is the first time that James Blakely is recognized as the rightful owner of the land.

But, even though Blakely is shown as having claim to the land in 1858, the Donation Land Claim was not recieved and recorded in Washington, D.C. until November 27, 1865, and and it was not recorded in the Linn County, Oregon records until January 8, 1877. The instrument filed at the Linn County Recorders Office reads:

> ...certificate number six hundred fifty two of the Register and Reciever at Oregon City Oregon... Notification No 2629 has been established to a donation of one section or six hundred and forty acres of land and that the same has been surveyed and designated as claim number fifty nine being parts of sections six and seven in township fourteen south of Range two west and claim number fifty one being part of section thirty one in township thirteen South of Range two west according to the official plat of the survey returned to the General Land Office by the Surveyor General being bounded area described

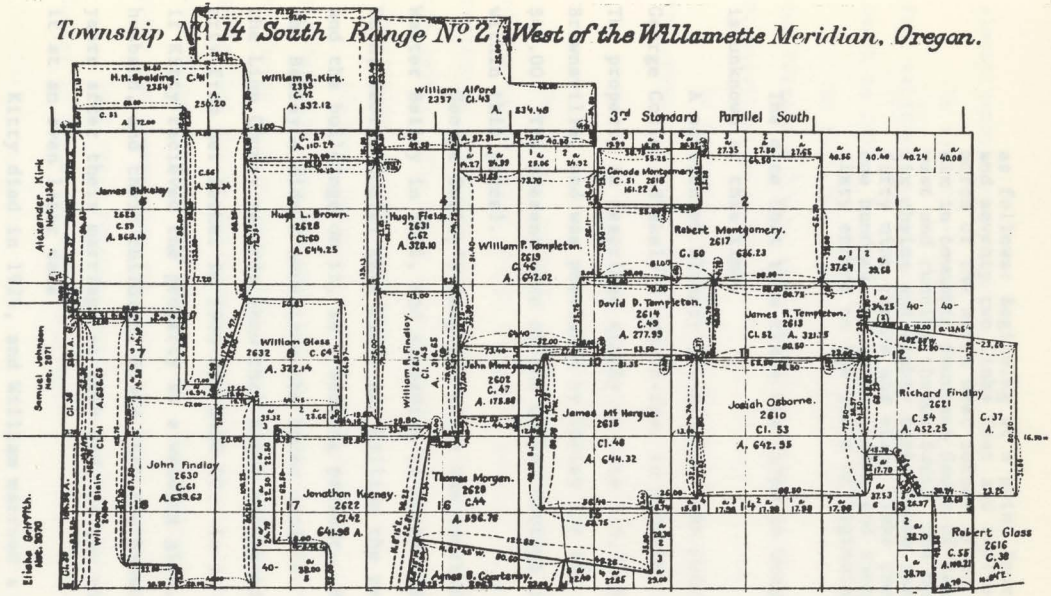


Fig. 2. Donation Land Claim survey of 1858 showing land claim of James Blakely.

> as follows: Beginning at a point four chains and seventy two links East and twelve chains North of the North west corner of said section six in township fourteen South of Range two west and running thence South one hundred and six chains and eighty three links thence East fifty nine chains and sixty links thence North one hundred and seven chains and thence West sixty chains to the place of beginning...[3]

The date that this claim was filed in Oregon City is unknown at this time.

A portion of Blakely's land claim was purchased by George Cooley, Blakely's son-in-law, in December of 1867. The property is described simply as Lots 5,6,7,&8, Block 10, Brownsville, and was purchased by Cooley for the sum of $40.00. The present site of the Cooley Cottage is located within this parcel.

George Cooley's daughter Kitty was married to William Walter Bailey in 1891, and according to Kitty's daughter Ruth, George Cooley gave Kitty and William the property, and the buildings on it, as a wedding present. However, the Bailey's didn't move into the house until c. 1904[4], and the Linn County records show that Kitty purchased the property from her father in 1906 for $500.00. It is unclear why, if Kitty recieved the property as a wedding gift, she and her husband, and their children, moved into the house as many years after their marriage as they did, or why they purchased it at an even later date.

Kitty died in 1921, and William married a woman named Edna Fox in the late 1920's. William died in 1948, followed

almost twenty years later by Edna.

In 1966 Edna's son from her first marriage, Byron Fox, recieved the property and lived in the house until his death in 1982.

In 1975 the property was split, and Byron Fox's daughter Elizabeth Foster recieved the two lots (7&8, Block 10, Brownsville) on which the Cooley Cottage is located.

In September of 1982 the property was purchased by the present owners, the Brownsville Restoration Society.

Construction History

The front, or north section of the Cooley Cottage is of box construction and is Classical Revival in style. This portion of the house was the first to be built and dates from the 1850's. The exact date of construction and the name of the original builder are unknown.

Although George Cooley did not legally (according to the date the deed was recorded) acquire the property that the house sits on until 1867, there is evidence that suggests that Cooley purchased the present house in 1857 and then moved it to its present site. This evidence also supports the theory that the house was built before 1857.

In a small personal notebook belonging to George Cooley is found the following entry:

Expenses in Building &c &c
at Calapooya [5]

1857
Dec.

Paid R. Benjamin for Hous.	50.00
Paid Wigli for 4500 shingles	20.00
Paid McDowell for lumber	13.90
Carpinter work. Bord &c	19.00
Canvassing	12.00
Moveing Hous	15.00
	$129.90
	$129.90
Fencing yard &c	32.00
	$161.90

This list also indicates that Cooley had quite a lot of work done on the house, perhaps to get it into shape before moving in.

Also found in Cooley's notebook is a sketch of a facade and a floorplan of a house. The facade in Cooley's book mirrirs what is now believed to be the original configuration of the north elevation of the Cooley Cottage. Cooley's floorplan (with the exception of three rooms on the side rather thn the present two, and small differences in the placement of windows and doors) bears strong resemblance to what is considered to be the original floorplan of the house (see Figure 3).

Other evidence of a pre-1867 construction date includes newspapers found under the wallpaper in the downstairs bedroom, and a rimlock that was found under the rear portion of the house. The newspapers that were found date from 1859-1864 (see Appendix C), and the rimlock has a

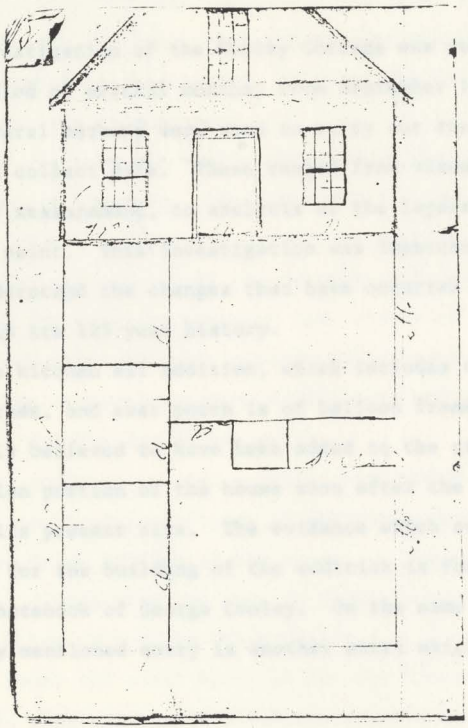


Fig. 3. Drawing of facade and floor-plan from personal notebook of George Cooley.

patent date of 1856.

Additions-Alterations to the Original House

Investigation of the Cooley Cottage was carried out over a period of several months, from September 1982 to May 1983. Several methods were used to carry out the investigation and collect data. These ranged from visual investigation and measurement, to analysis of the layers of wallpaper and paint. This investigation was important in helping to understand the changes that have occurred in the building in its 125 year history.

The kitchen ell addition, which includes the dining room, kitchen, and east porch is of balloon frame construction and is believed to have been added to the original box construction portion of the house soon after the house was moved to its present site. The evidence which supports an 1858 date for the building of the addition is found in the personal notebook of George Cooley. On the same page as the previously mentioned entry is another entry which reads as follows:

1858		
Aug. 21	Paid John Vernon for work on house	12.00
	Paid W.B. Smith for work	116.78
	" R.B. Woody "	44.00
	" Riggs & Fields for Lumber	82.29
	" Winning for painting	8.00
	for oil paint &c	17.50
	Paid Gibb for Build Chimney	15.00

for brick for Chimney	30.00
Paid G. Lewis for Shingles	15.00
	$504.47[6]

It is believed that the lumber mentioned was used to frame the new addition, that the chimney mentioned is the hung chimney in the kitchen, and that the shingles were used to cover the kitchen roof.

This addition was simply attached to the south end of the original building. The plank wall at the southern end of the original house was cut off at ceiling height and removed. The top portion of the original wall was left intact, and the original upstairs rear window of the house became a door into the newly created attic space over the kitchen. The original exterior window trim and weatherboarding is visible inside the attic.

This addition created a dining room which is partly in the box construction portion of the house, and partly in the balloon frame portion of the house. A jog in the west wall of the dining room (as seen in Figure4) marks the transition from box to balloon construction.

To cover the plank walls in the box construction portion of the room and create a uniform appearance, the walls were covered with 7/8" x 5" tongue-and-groove boards applied horizontally. The entire ceiling was also covered with these boards, which helped to eliminate a seam between the old house and the new addition.

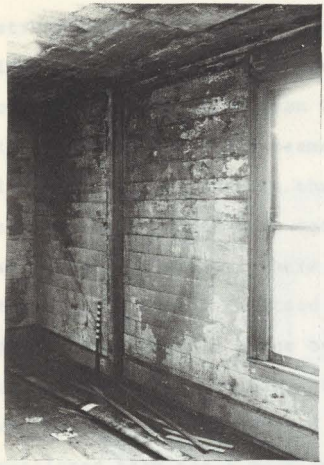


Fig. 4. West wall of the dining room, showing the transition from box to balloon construction.

Both the north and east doors of the kitchen have been altered. They have both had four inches added to their width (two inches on each side) and the hardware has been relocated. This was probably done at the time of the addition, and they are quite likely original doors that have been reused. One point of confusion is due to the fact that all of the rimlocks on the kitchen doors (of those with dates cast into them) have patent dates of 1868.

Although exact dates are not known, the next changes to take place in the development of the house probably occurred in the last quarter of the nineteenth-century. These include the addition of a woodshed to the east side of the house, the building of a fruit-milk house, and enlargement of the east porch.

The woodshed appears to be a structure that was dismantled at another site and brought to its present location

and reassembled. There are many indications in the construction of the woodshed which support this idea. One indication is that the majority of the braces used in the construction are made from 2 x 4 material, while the mortises in the posts and beams are cut to accept braces of a larger size. Another is that the 6 x 6 beam at the east end of the woodshed does not mortise into the 6 x 6 post at its southern end. There is simply no mortise in the post to accept the beam, instead the beam butts up against the post and is held in place by nails on its west side, and by a 1 x 6 board on the east side which spans both the post and the beam and is secured with nails. Also, the above mentioned beam has a mortise on its underside to accept a brace, but the post has no matching mortise on its north side (see Figure 5).

Fig. 5. Southeast end of woodshed. Note that beam only butts up to post.

The western end of the woodshed roof is tied into the roof over the kitchen, and the area over the kitchen roof is separated from the woodshed by a vertical board and batten wall (see Figure 6). In investigating this area of

Fig. 6. North end of woodshed and east side porch.

the kitchen roof it was discovered that the kitchen roof was covered with wood shingles that showed many years of wear. This is evidence that the woodshed was added to the house many years after the kitchen ell was built.

The porch on the east side of the house under the woodshed uses two different framing systems. The original portion of the porch (see First Floor Plan, Appendix F) sits on the framing of the kitchen addition, while the portion that was added later sits on its own separate frame. This addition was most likely done at the time the woodshed was

added.

The other change which is believed to have occurred at this time is the construction of the brick fruit-milk house.

The first major alterations to occurr in the interior of the house took place c. 1904. At this time the original central fireplace was removed and replaced by the present hung chimney on the north wall of the dining room; the original stairs were demolished and the present stairs were built; the kitchen was expanded into what is believed to have originally been a pantry on the east side of the kitchen; and the north wall of the downstairs bedroom was moved about two feet to the north. A portion of this wall was then moved even farther north to become the south wall of the entry hall.

Evidence of these changes is found in the numerous patches in floors and ceilings, removal of portions of joists and ribbon strips, in the layers of wallpaper found on the walls, paint lines, differences in paint layer sequences, and patches in exterior walls.

The original location of the fireplace is indicated by patched floor joists in the front part of the house, and by patches in the parlor and dining room floors and ceilings.

Three floor joists beneath the parlor floor were cut through at one time and then patched at a later date (see Transverse Section B-B, Appendix F). These were probably

cut originally to make room for the masonry of the fireplace.

Patches and paint lines on the parlor floor indicate where the original hearth was located, and also indicate the position of the original walls between the parlor and the original kitchen.

Patches on the ceilings of the parlor and the dining room indicate the original placement of walls, as well as the original location of the stairway (see First Floor Plan, Appendix F). Patch lines on the bedroom floors upstairs match the lines found on the ceilings below; further evidence of the original location of the staircase and chimney. A patch in the second floor bedroom ceiling, and a patch in the roof give an idea of the size of the original chimney (see Longitudinal Section A-A, Appendix F).

The present wall between the parlor and dining room was added at this time. A difference in the wallpaper layer sequence on the east wall of the parlor indicates where the original wall was located.

Investigation of the entry hall showed that several second floor joists have been cut through to install the new staircase, and that a new header has been installed. The new header is made from surfaced lumber, and was installed using large wire nails rather than cut nails as found in the rest of the house. This suggests turn-of-the-century work, and is further evidence to show that the present stairs are not original.

It was also discovered that the ribbon strip on the east wall of the stairwell has been cut out and that new material has been nailed to the plank wall as furring strips for the horizontal boarding that was applied to the wall.

The style of the original wallpaper used in the stairwell and entry hall, as well as a date of February 28, 1904 found on some of the newspaper that was used to prepare the stairwell walls for wallpapering help to place the date of these alterations c. 1904.

As mentioned earlier, the north wall of the downstairs bedroom was moved to the north a few feet at this same time. A portion of the west end of this wall was then cut out and moved even further north, becoming the south wall of the entry hall. The original location of this wall is marked by a wallpaper line on the east wall of the downstairs bedroom, a change in the sequence of wallpaper patterns, and a difference in the number of layers found on the present east wall of the room.

Shortening of the east window in the south wall of the kitchen, and a subsequent patch on the exterior are evidence of the changes that occurred in the kitchen at this time. This window has been changed from a 6/6 to a 3/6, and a counter with sink and cabinets has been installed along the south wall of the kitchen.

Paint lines on the south wall of the kitchen, and a flat arch over the opening between the main part of the

kitchen and the ell where the cabinets are located indicate where the east wall of the kitchen originally was. It is believed that this wall contained a door to the pantry at one time.

Also undertaken at this time (c. 1904) were some exterior alterations to the front (north side) of the house. The lower east window was removed and the opening enlarged slightly, then the front door (along with casing and trim) was removed from its original central location and placed in the opening left by the removal of the east window. The lower west window was moved nine inches to the east at this same time.

Also believed to have been done at this time is the addition of a front porch. Figure 7 shows the front porch c. 1907. Although the front porch has been removed in recent years, evidence of its size and style has been left on the weatherboards on the front of the house. Paint lines form a clear outline, showing where the porch used to be.

After the alterations to the front door and the windows, the original weatherboarding on the lower half of the north side of the house was replaced by new weatherboarding. The front porch was added over this new siding, which means that it must have been built after the new siding was installed. Figure 7 shows the front of the house c. 1907 after the changes to the door and windows, and the addition of the front porch.

Fig. 7. North Elevation of the Cooley Cottage c. 1907. (photo courtesy of David Ramstead)

Evidence of the door and window changes is found in the form of patches on the interior of the north wall of the parlor. The space left when the door was moved has been patched with planks and boards. Two of the boards found in the patch are 7/8" x 5" tongue-and-groove, painted in the same color as the ceiling boards in the entry hall; which means that they most likely came from the entry hall ceiling when the new stairs were built.

The wallpaper study provides further evidence to show that the interior and exterior alterations took place at the same time. The first layer of wallpaper on the door patch is much later than the first layer on other areas of the same wall. There are also fewer layers of wallpaper on the

patched area.

The next major change to the house was the introduction of electricity in the early years of the twentieth-century. Information about the date the house was wired was obtained from an electrician in Brownsville. He had worked for the electrician who originally wired the house, and he remembers being told that the house was wired c. 1910.[7]

The next alterations were made to the windows in the parlor and dining room. The sash in the windows of these rooms was changed from 6/6 to 1/1. Photo documentation shows that this change took place between 1907 and 1933. In the c. 1907 photograph in Figure 7 the sash in the west (right side of the picture) window of the parlor is 6/6; in the c. 1933 photograph in Figure 8 the sash in this same window is 1/1.

By the late nineteen-teens Kitty Bailey had become quite ill and was no longer able to make the long trip to the outdoor bathroom. It was at this time, c. 1919, that the bathroom was added to the rear of the kitchen.[8]

Kitty Bailey died in 1921 and William remarried in the late 1920's. In the early 1930's the last alterations took place. These consisted of laying a new floor of 3/4' x 3¼" tongue-and-groove Douglas fir flooring over the original floor in the dining room, downstairs bedroom, kitchen, and east porch, installation of floor coverings, and painting of the walls. The c. 1930 date for these alterations comes from

Fig. 8. North elevation of the Cooley Cottage c. 1933. (photo courtesy of David Ramstead)

the newspapers that were spread under the carpet in the parlor, under the linoleum carpet in the dining room, and under the linoleum in the downstairs bedroom (see Appendix C).

Changes to the site have occurred over the years also. Originally the site consisted of four lots (5,6,7 & 8, Block 10, Brownsville) but is now made up of only two (lots 7 & 8).

The two lots to the south of the present house at one time contained a barn and a chicken house. These no longer stand, and a single family residence is now located on the property. According to the great-grandson of George Cooley, the barn was still standing as late as 1948. A portion of the barn can be seen in the right rear of the photograph in Figure 9.

Fig. 9. Photograph showing the Cooley property in the early 1940's. A portion of the barn can be seen in the upper right hand corner of the picture.
(photo courtesy of David Ramstead)

NOTES FOR SECTION I

1 Haskins, Leslie. "The Story of a Pioneer Store" Brownsville, Oregon 1851-1938. Transcript of an interview with W.C. Cooley, son of George Cooley, conducted by Leslie Haskins in the 1930's.

2 Land survey of T 14 S, R 2 W of the Willamette Meridian conducted for the General Land Office in March of 1853, pp. 61-62. The records of this survey are available at the Bureau of Land Management office in Eugene, Oregon.

3 Instrument on file at the Linn County Recorders Office, Albany, Oregon.

4 Ruth Bailey Ramstead, (granddaughter of George Cooley), interviews, Eugene, Oregon, 1981 and 1982. Interviews were conducted by Joni Nelson of Brownsville, Oregon.

5 Brownsville was known as Calapooya Post Office from 1850 to 1859.

6 Although the total is incorrect, the figure $504.47 is believed to have been arrived at by adding the total of the December 1857 entry to the total of 1858 entry.

7 This information was given to a member of the Brownsville Restoration Society by Chet Brox, an electrician who lives in Brownsville, Oregon, and who at one time worked for the electrician who originally wired the house.

8 David Ramstead (great-grandson of George Cooley), interviews,Eugene, Oregon, April 1983.

III

RATIONALE

The Cooley Cottage is a complex building, utilizing many types of construction systems and containing elements of American life from the 1850's to the 1930's.

Four different types of building systems are used in the house and outbuildings (box construction, balloon framing, post and beam, and brick), dating from the 1850's to the second decade of the twentieth-century. It has modern utilities such as indoor plumbing and electricity (even though the present systems are antiquated by modern standards). But, at the same time the house does not have, and never has had, a central heating system. And, despite all of the changes and alterations that have taken place, the house has really changed very little. As mentioned earlier, the last changes in the house took place in the early 1930's, and the house has remained the same (although deteriorated) ever since.

The parlor still has the feeling of a box construction house of the 1850's, with its thin, plank walls, and thick window casings. The electrical and plumbing fixtures are reminiscent of the early twentieth-century. And the

floor coverings and paint colors on the first floor of the house reflect the styles of the 1920's and 1930's.

The Cooley Cottage has recently been placed on the National Register of Historic Places in recognition of its significance as a cultural resource. The changes which have occurred in the Cooley Cottage contribute to this significance and should be retained.

Because the Brownsville Restoration Society plans to rehabilitate the house and not restore it, it is recommended that the rehabilitation be done in a manner which will preserve the house as it currently exists, which is c. 1930.

The reasons for this are threefold. First, the house has been recognized as significant in its present stage of development, therefore any work that is done should be done in a way which maintains this historical integrity. Second, rehabilitating the house to a c. 1930 date (the date at which the house presently exists) will be much less expensive than taking the house to an earlier time period. When you go back to a time period previous to 1930 you must begin to make changes by removal of some elements and the addition of others in order to maintain historical accuracy, and the integrity of the building. This increases the amount of work necessary to complete the rehabilitation, and adds to the expense. Third, if the building is left as is the historical integrity and accuracy of the building will not be threatened.

For these reasons the recommendations made in this report have been made with a c. 1930 rehabilitation date in mind.

IV

PRESERVATION OBJECTIVES AND GUIDELINES

The primary objective of the Brownsville Restoration Society is to preserve the Cooley Cottage by rehabilitating it. They have a limited budget and plan to do the work themselves using a volunteer labor force. The goal is to maintain the historical integrity and significance of the building, while improving its condition as a modern single family dwelling.

This goal is attainable, but careful planning, and an understanding of the significance and limitations of the house are essential to success.

The Cooley Cottage is, and always has been, a small single family dwelling. This fact must be kept in mind when developing a plan for rehabilitation. One should avoid the urge to make the house something that it has never been.

The following guidelines are designed to help the Society in planning and carrying out the rehabilitation work.

1. When replacing historic fabric with new material it is good practice to mark the new materials with the date that the work was done. This provides a

record of when the work was done, and will be helpful in future investigations.

2. Avoid the use of harsh chemicals and cleaners. These are harmful to your health as well as to the building fabric. If it is necessary to use these, proper safety precautions must be exercised.

3. When cleaning historic fabric, always start with the mildest cleanser and work up. Always do a small test patch in an inconspicuous area before using any cleaning method on a large area.

4. Be certain that any salvaged lumber that is used as replacement material is sound, dry, clean, and free of insects and fungus.

5. Differential settlement and some degree of permanent deflection and dislocation of elements is to be expected in historic structures. Use care when attempting to straighten and level. It is possible to introduce forces into the building that could result in further damage.

6. Loss of historic fabric can be kept to a minimum through careful planning and workmanship.

7. Make sure that any work that is done is reversible. Don't undertake any work that can't be undone in the future. e.g. Don't apply a treatment to brickwork, such as injection of silicon or other material, that is permanent and can't be removed.

8. Leave evidence of the evolution of the house such as patches, paintlines, wallpaper patches, etc.. It is important to preserve these for future investigation purposes. Methods of investigation and analysis are constantly improving, and future investigators will find this information invaluable.

9. Be certain to remedy the cause of the problem as well as the problem itself. e.g. Don't fix the floor that has rotted because of water entering through a failed roof, without also fixing the roof.

The following guidelines are the Secretary of the Interior's Standards for Historic Preservation Projects, and apply to all treatments undertaken on historic properties listed in the National Register of Historic Places.

General Standards

1. Every reasonable effort shall be made to provide a compatible use for a property that requires minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.

2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations which have no historical basis and which seek to create an earlier appearance shall be discouraged.

4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site, shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated

by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any acquisition, protection, stabilization, preservation, rehabilitation, restoration, or reconstruction project.

Specific Standards for Rehabilitation

9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historic, architectural, or cultural material and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

The following is the definition of rehabilitation, as defined in the Secretary of the Interior's Standards for Historic Preservation Projects.

Rehabilitation

Is defined as the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

V

ANALYSIS OF EXISTING CONDITIONS AND RECOMMENDATIONS FOR PRESERVATION

Unfortunately, routine maintenance of the Cooley Cottage has been neglected for many years, leading to the deterioration of the building fabric in many areas.

Exterior

Foundations

The foundations of the original box construction portion of the house is made up of field stones and a few pieces of roughly worked rubble. Pieces of wood and shingles were used between the stones and the sills as an aid to leveling. The stones are unevenly spaced, and are located primarily on the outside edges of the frame with the centers of the joists being unsupported. The area where the three joists were cut through for the original fireplace is the only place where stones are used under joists.

When originally constructed, no precautions were taken to prevent the travel of insects and moisture into the sills. Thus, water collects on the stones and wets the wood,

eventually causing problems. At one point mortar was applied to the outside of the foundation stones on the west side in an attempt to fill the spaces between stones. This only helped to hold moisture in the stones, adding to the problems.

In this instance, excess moisture has led to the deterioration of many of the wood shims, resulting in settlement and further stone to sill contact.

Because the stones of the foundation are simply laid on the ground with no larger stones or footings placed under them differential settlement has occurred. Although differential settlement is gound in almost all buildings, the small size, and wide spacing of the foundation stones used here has probably made this foundation more susceptible.

The foundation of the kitchen addition is made from various size blocks of squared rubble. The eastern and southern walls of the foundation are made up of several stone piers, while the west side is laid up as a solid wall. All of the stones were laid dry originally.

The north side of this addition is attached to the southern end of the original portion of the house and shares a common foundation system of spaced stones.

The foundation under this section exhibits many of the same problems that are found in the foundation under the front section of the house. The stones are laid on the ground and have no footings, there are no moisture barriers

between foundation and sills, and the west wall has had mortar applied to the joints between the stones.

Support for the joists in this section is provided for by the addition of a 6 x 8 beam at their mid-point, with stone piers for support. However, the stones in the pier at the southern end of the beam have slipped and the pier has failed. This has left the beam supported by the 1" thick boards of the skirting at the rear of the house, and by a short length of 2 x 4 material that has been nailed to the east side of the beam. Because the bottoms of both the skirting and the 2 x 4 are in contact with the ground they have rotted, resulted in the effective shortening of these members and subsequent sagging of the 6 x 8 beam (see Figure 10).

Fig. 10. South elevation of Cooley Cottage showing skirting in contact with ground.

The foundation wall on the west side has failed under the kitchen window, and shows signs of deterioration elsewhere along its length (see Figure 11).

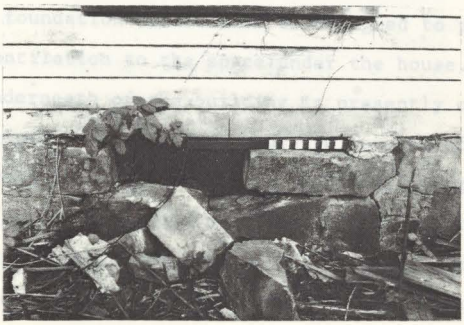


Fig. 11. West side foundation wall.

To provide the house with the best chance of survival into the future it is recommended that a modern concrete foundation be put under the house. It should have proper moisture and insect barriers incorporated into the design, and it should be as deep as possible to allow room for mechanical systems such as electrical wiring, plumbing, heating ducts, water heater, and furnace.

Care should be taken to raise the house as little as possible so that the house is not placed on a pedastal, and the connection between ground and house lost. This building to earth connection is significant and care should be taken to preserve it.

The foundation should be designed in such a way that the present foundation stones can be reused, therefore maintaining the historical appearance of the foundation as much as possible.

The foundation should also be designed to provide adequate ventilation to the space under the house. The fact that the underneath of the building is presently open has probably helped the building to survive because of the large amount of ventilation this allows. When designing the new foundation it would be good practice to incorporate more ventilation than the minimum required by code. Screened vents should be used to prevent the entrance of insects and rodents.

Proper drainage should also be installed at the same time that the foundation work is being done. Drainage is important to help carry water away from the building.

Good reference works for information about both foundations and drainage are Dwelling House Construction by Albert G.H. Dietz, and Construction: Principles, Materials and Methods by Olin, Schmidt, and Lewis.

A good foundation is an essential part of the rehabilitation of the Cooley Cottage for many reasons. First, it will place the house on a solid base. This will allow the house to be straightened and levelled to some degree, and will add years to the life of the building. Second, it a foundation will add space under the house for such things

utilities and storage. The house is presently lacking in space for these things, and a basement or crawl space will help to provide this necessary space, therefore eliminating the need to incorporate new utilities and storage areas into the house on the first and second floors and endangering the historic integrity of the house.

Sills

The sills of the house have suffered damage due to the effects of moisture and insect infestation.

Wood ashes piled against the house on the east side have kept the sill, ledger, and wall planks wet, resulting in the deterioration of these members (see Figure 12). The deteriorated areas of these members should be repaired with new material to match.

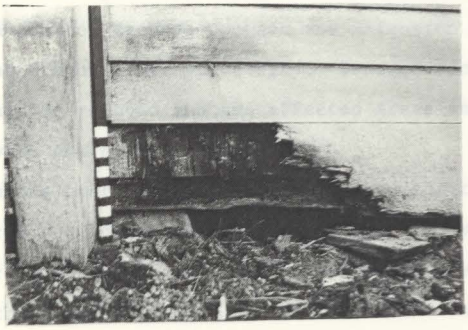


Fig. 12. Deteriorated area of sill, ledger, water table on east side of house.

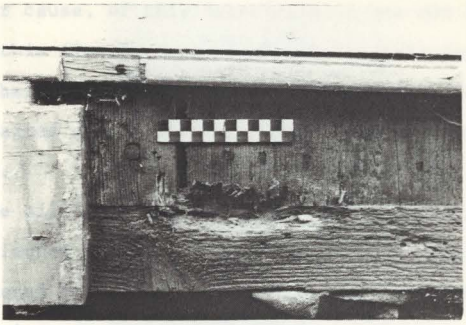


Fig. 13. Termite damage, northeast corner of house.

On the northeast corner of the house, north side, there is a small pocket of deterioration (see Figure 13) which has been caused by termite infestation. The damage is slight and the attack appears to have died out, but this area should be carefully inspected for further signs of infestation when repair work is done. For information and help with control methods contact the Extension Entomology Service at Oregon State University. Damaged wood in this area should be removed and the affected areas should be patched with new material to match.

On the west side of the house, deterioration was found in the area behind the walnut tree stump. The sill and ledger appear sound on the outside, but when a probe was inserted between the sill and ledger and pushed toward the interior of the sill, it easily penetrated the sill to a depth of almost four inches, indicating a serious problem. The full

extent, or cause, of this deterioration has not been determined at this time because of the inaccessibility of the member. Further inspection should be carried out and damaged areas repaired or replaced with new material to match as necessary.

The sill on the west side of the kitchen addition under the kitchen window has rotted due to the entrance of water. Damaged sections of this sill should be removed and patched using new material to match.

The southwest corner of the sills on the kitchen addition has also deteriorated due to the entrance of water and subsequent brown rot. The extent of this damage is seen in Figure 14. This joint should be reconstructed to match the original.

This area has also been subjected to damage from the buprestid beetle. The oval exit holes visible in the wood in Figure 14 are evidence that these pests were present at one time but have since departed. Buprestids rarely reinfest and should not be a problem in the future. For more information about thes insects refer to extension circular 713, "The Golden Buprestid", available from the Oregon State University Extension Service.

The sill on the south side of the house has been extensively damaged by the effects of brown rot. The damage is especially severe in the area where water pipes were run through the wall of the house, and indication that

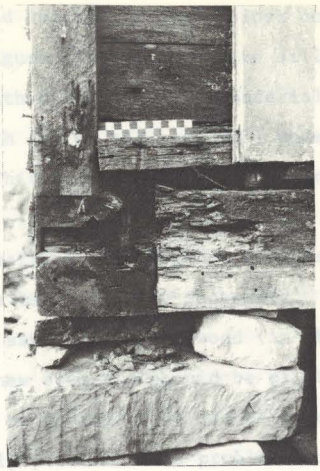


Fig. 14. Deteriorated sills at southwest corner.

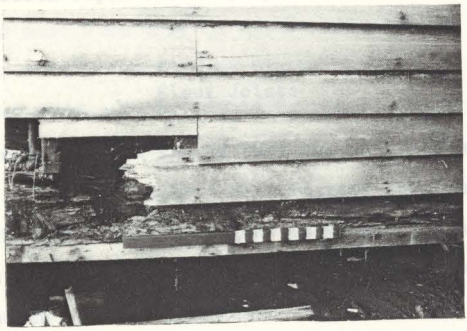


Fig. 15. Deterioration in the sill under the south end of the house.

condensation and leakage from the pipes contributed to the problem (see Figure 15). This entire sill should be removed and replaced with a new one using material to match.

The south end of the east sill under the kitchen has also rotted. This should be repaired using new material to match.

When repairing sills remove only as much of the historic fabric as is absolutely necessary. Repairs should be made using the same species of wood (in this case Douglas fir), and all new elements should be of the same size as those they are replacing. The use of preservative treated lumber will help prevent these problems from reoccurring in the future. For further information refer to Principles for Protecting Wood Buildings From Decay, USDA Forest Service Research Paper FPL 190, by T.C. Scheffer and A.F. Verrall.

Floor Joists

Investigation showed that the west end of the first, second, fourth, fifth, and sixth joists from the southern end of the house have undergone varying degrees of deterioration and need to be repaired. Inspection of the joists to the north of the sixth joist was not possible because of the low clearance under the house. However, visual inspection showed that the white surface growth of a decay fungus is present on many of the joist ends. This is an indication

that deterioration has begun. Further inspection of these members is necessary.

Inspection of the east end of the accessible joists under the kitchen showed that some white surface growth is present but that the joists are still servicable.

Due to low clearance under the original section of the house it was only possible to probe those few joists that were accessible on the west side in the area of the walnut stump. These appear to be sound, but given the condition of the sill in this area they should be inspected more closely when further inspection of the sill is carried out.

Visual inspection of the joists through a hole in the floor of the parlor showed that some white surface growth is present on many of the joists in this section, especially the ends. It will be necessary to fully inspect the joists at a time when more clearance is available under the house, perhaps when excavation for the foundation is undertaken.

The second floor joists in the front section of the house are for the most part inaccessible. The ends of those that can be seen from below on the west side of the parlor are free from rot; however, some of the joists are pulling out of the ribbon strip and could present a serious problem in the future. Tying the wall between the parlor and dining room, and the north wall of the downstairs bedroom to the exterior walls to act as a shear wall would be helpful, but a registered engineer or architect should be consulted on

this matter.

The ceiling/roof joists in the kitchen addition have some white surface growth but deterioration is minimal. These members are still sound and can remain in service. This area must be kept dry and well ventilated in the future to prevent the further growth of fungi.

Proper detailing to prevent the entrance of water, along with proper ventilation, will be necessary to keep these elements dry in the future. If the moisture content of the wood is kept below 20% the fungus will die and do no further damage. For further information see Principles of Protecting Wood Buildings From Decay.

Studs, Wall Planks, Top Plates, Ribbon Strips

The top plate on the west wall of the kitchen has small areas of brown rot along its entire length but the timber is still servicable. After removing all deteriorated wood, the rotted areas should be repaired by patching with new material to match.

The top plate on the east wall of the kitchen is in much better condition, having only one small spot of brown rot. This is located under the end of the third rafter from the south wall. All deteriorated wood should be removed and the affected area patched with new material to match.

Inspection of the studs in the south wall of the

kitchen showed that the bottoms of many of them have rotted due to moisture problems and contact with the rotted sill below. The rotted sections of the studs should be cut out and the studs repaired using new material to match. This work can probably be carried out in situ by splicing new ends on to the studs. This eliminates the need to remove the stud entirely for repair.

The studs in the east and west walls of the kitchen addition were inaccessible and could not be properly inspected. Further inspection should be performed when possible during the course of rehabilitation. Considering the condition of the sills and joists, especially those on the west side, it is quite likely that the studs will have some deterioration problems also.

Inspection of the tops of the planks and the upper ribbon strip in the box construction portion of the house was carried out in a short (approximately 4') section on the inside of the west wall in the south bedroom upstairs, and in a 12' section on the outsied of the east wall behind the cornice.

Inspection of the upstairs bedroom location uncovered an area of advanced decay. The ribbon strip is badly deteriorated, the tops of the furring strips are rotted, and the wall planks have begun to deteriorate. The extreme dampness in this area has led to deterioration by a decay fungus. The extensive network of hyphae belonging to this

fungus can be seen in Figure 16. Figure 17 is a close-up of the area and shows the fruiting bodies of this particular fungus, an indication that the attack is in an advanced stage.

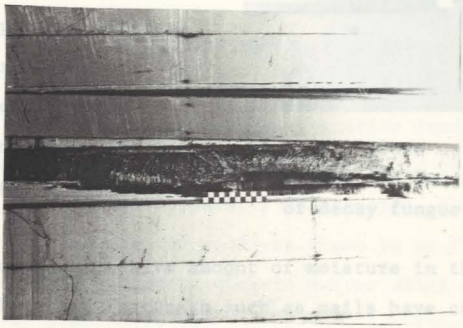


Fig. 16. Deterioration of ribbon strip and other members caused by decay fungus. (scale = 6")

Also found in this area was a nest of small ants. They are the odorous ant Tapinoma sessile which are not a structural pest, but their presence is further evidence of the amount of moisture present in this location.

Portions of the affected members which are severly deteriorated and no longer serviceable should be removed and the members should be repaired using new material to match. Removal of the source of moisture will cause the decay fungus to die, and it will not infect new members unless those members become wet in the future. Fixing the

roof and sealing possible water entry points in the siding and trim will prevent future water infiltration. Ant colonies should be destroyed and nesting areas treated to prevent reinfestation. For advice on treatments contact the Extension Entomology Service at Oregon State University.

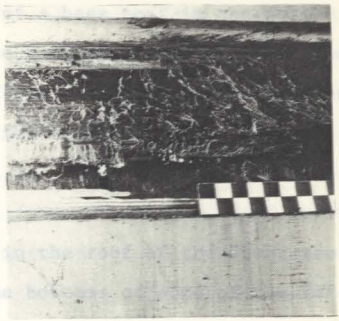


Fig. 17. Close-up showing hyphae and fruiting bodies of decay fungus. (scale=6")

Given the excessive amoont of moisture in this area it is possible that fasteners such as nails have corroded. All nails should be inspected during rehabilitation work. Any that have failed should be replaced with new nails that are galvanized.

Since only a small part of the ribbon strip and tops of the planks was able to be inspected, it is recommended that one or two of the wallboards at the top of the knee walls in the upstairs bedrooms be removed and the remainder of the ribbon strip and planks be inspected for damage similar to that found on the west wall.

The tops of the planks on the north half of the east wall were inspected from the outside and were found to be serviceable. The only problems discovered were some white

surface growth and the remains of a bees nest in the northeast corner. The remains of the honeycomb should be removed, and the remainder of the plank tops should be inspected when the cornice molding is removed for repair.

Roof

The tops of the rafters in the roof of the front section are in good condition. The bottoms of some of the rafters on the west side however have some white surface growth and the ends have rotted. When a ceiling board on the west side of the south bedroom upstairs was removed, the cavity between the ceiling and the roof was found to be full of leaves and other decomposing organic matter which acts to hold moisture, eventually leading to rot (see Figure 27). All of this organic matter should be cleaned out and any rotted rafter ends should be repaired using new material to match.

The sheathing in the attic space of the front section of the house is in good condition. The sheathing over the upstairs bedroom area was not accessible at the time of inspection and should be inspected at the time the shingles are removed. Any sheathing that is rotted and no longer serviceable should be replaced or repaired using new material to match.

The shingles on this section of the roof are in poor condition and should be removed and a new roof covering

installed. Wood shingles are recommended. The use of wood shingles will maintain the historic appearance of the house. For further information on roofing materials and their applications refer to preservation brief number 4, "Roofing for Historic Buildings". This, and other preservation briefs are available from the State Historic Preservation Office.

The rafters and sheathing on the roof of the kitchen are sound and can remain in service, the shingles however are in poor condition and must be replaced. The same type shingles that are used on the front section roof should be used to cover this roof also.

The deteriorated condition of the roof has allowed water to enter the building over a long period of time, and has been the major contributor to the rot problems that are found throughout the house.

Siding

The weatherboarding on the east, north, and west sides of the house is generally in good condition. the problems that exist are minor ones such as cracked boards, mold growth, nails that have pulled out, paint that has worn off, and blackberry vines growing up and under the siding.

Weatherboards that are badly cracked or split should be replaced using new material to match. Large cracks and splits in siding will not be sealed by a coat of paint and will allow water to enter behind the siding, eventually

causing problems. Smaller cracks in weatherboards can be filled using a caulking compound. Loose siding should be renailed using new cut nails similar in appearance to the originals, as well as in size. All blackberry vines should be removed, the mold growth should be washed using a solution of warm water, chlorine bleach, and trisodiumphosphate (use caution as this solution can cause minor burns and irritation), and the siding should be properly prepared and painted. For further information on painting refer to preservation brief number 10, "Exterior Paint Problems on Historic Woodwork".

The clapboards on the south side of the house are in poor condition due to the effects of weathering, and lack of protection. They are badly cupped and cracked, and should be replaced entirely with new clapboards to match.

Trim

The water table on the west side, behind the walnut stump, has rotted and should be repaired by splicing in a new section using new material to match the original size and shape. While this water table is removed for repair the sill and ledger in this area should be further inspected to determine the extent, and the cause, of the deterioration in these members.

The water table on the north side of the house is missing in the area where the front porch was removed. If

the front porch is not going to be rebuilt at this time, a water table to match the original should be installed on the front.

On the east side, the water table in the vicinity of the ash pile has rotted away (see Figure 12). This should be repaired by splicing in a new section to match.

The large Classical Revival style eaves and cornice on the front section of the house are in fair condition. Problems include: water staining (particularly on the west side), rotting of the top cyma recta molding in many places, deterioration of the small ogee molding just below the cyma recta on the west side, mold growth and loss of paint, and many gaps caused by settlement and loosening of the moldings.

The eaves of the kitchen addition suffer from many of these same problems. Also, the corner boards on the southeast corner have rotted, and the fascia board on the south end of the house is weathered and worn.

The classically proportioned eaves on the front section of the house are an architecturally significant part of the building and care should be taken to preserve as much of the original material as possible. When it is necessary to replace molding pieces the new pieces should be made from the same material as the originals, and the profiles of the originals should be copied and used for the new moldings. Deteriorated moldings should be repaired by patching when possible.

Some of the gaps in the moldings will be closed when the building is p;aced on the new foundation and leveled. Those gaps that remain should be closed by refastening of the moldings and by caulking. This will prevent the future entry of insects and water.

The corner boards on the southeast corner should be repaired by patching, and the deteriorated fascia board on the south end of the house should be replaced with one of new material to match.

All trim should be cleaned of mold using the method mentioned on page 51, prepared, and painted. Refer to preservation brief number 10 for further information.

Porches

The deck of the east side porch has rotted and needs to be replaced. The deck should be replaced with a single layer of wood to match the width of the present top layer, and the present thickness of both layers. The single layer of decking will maintain the historical look of the porch, but it will eliminate the poor detail of two layers of decking with a space in between which traps moisture and leads to rotting. For further information on detailing to prevent decay refer to the pamphlet "Protect Your Home Against Decay and Insects", available from the Forest Research Laboratory at Oregon State University.

The end grain of all exposed boards should be sealed

by painting to prevent moisture from wicking up the end grain of the wood.

The trim boards on the north end of the porch have rotted due to wood to earth contact, and by the effects of moisture that was held in the large pile of ashes that had been deposited at the end of the porch (see Figure 18).

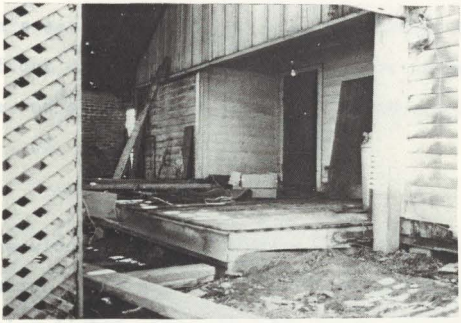


Fig. 18. East side porch showing earth to wood contact and deteriorated trim boards.

The rotted trim boards should be replaced with ones of new material to match. Before the pieces are installed they should be back-primed to provide extra protection against rot. All pieces of trim that are replaced should recieve this same treatment.

The stairs of the porch are curently missing. These should be replaced with a new set to match the style of the

original stairs.

The front porch had deteriorated over the past years and has been removed piece-by-piece until nothing remains. If the porch is going to replaced as part of the rehabilitation it should be replaced with one that matches that seen in Figure 7. To replace the porch with one of a different style would be inaccurate and should be avoided.

If the porch is not going to be replaced at this time then a set of steps with a small landing should be built for the front door. Their design should be compatible with the scale and style of the house, and with front yard area.

Windows

The windows in the building are in various stages of deterioration. All have worn paint and loose putty, many have missing lights, and some have loose muntins, rails, and stiles.

All windows should be repaired as necessary, old putty removed and new putty applied, and all should be painted. New elements should be made from material similar to that of the original, and all new elements should have the same profiles as those of the original elments.

The frames and sills of the windows are sound with the exception of the sill on the west window of the south wall of the kitchen. This is badly weathered and there is a small

amount of rot. This sill should be replaced with a new sill made from similar material to matc the original.

For information on the care and painting of windows refer to "Conservation of Historic Window Glass" by Richard O. Byrne. This article is found in the APT Bulletin, Vol. XIII, No. 3, 1981.

Doors

The exterior doors are weathered but still very serviceable. The east and west doors in the kitchen no longer fit properly due to settlement and swelling but the doors themselves are still in good condition.

All doors should be cleaned and painted, repairs made so that they fit properly, and the front door with etched glass light should be reinstalled. Those exterior doors that have graining on the interior side should be treated as recommended in the section on interior doors.

When repainting the doors it is important to paint the bottoms of all exterior doors to seal the grain of the wood and prevent moisture from wicking up the end-grain of the wood.

Interior

Floors

The floors in the house are in varying stages of deterioration due to the entrance of water, primarily from the failed roof. Portions of some floors are also heavily stained, most likely from the effects of animal urine.

The floor in the entry hall is in sound condition, but the floorboards directly in front of the entrance were quite damp when inspected. This can be attributed to the poor fit of the present front door which allows water to blow in, and the end-grain of the floorboards being exposed to the weather.

The c. 1904 front door with etched glass light should be reinstalled and properly fitted, a new threshold should be made to match the old, and the ends of the floorboards should be sealed to prevent moisture from wicking up into the boards through the end-grain.

The present linoleum floor covering is worn. This should be removed, saving a sample which includes the full repeat of the pattern, and a new floor covering applied. Since linoleum is no longer produced it is recommended that vinyl flooring be used to cover this area. To leave the floor uncovered would be historically inaccurate for the

c. 1930 date that is being used as a guideline for this rehabilitation. The floor in this area is also in a heavy wear area and should be covered for protection. If available, a reproduction pattern in vinyl would be the best choice.

The parlor floor has a rotted area in the southwest corner of the room. The rot is contained in the first two floorboards from the west wall, beginning at the south wall and running aproximately 3' to the north (see Figure 19).

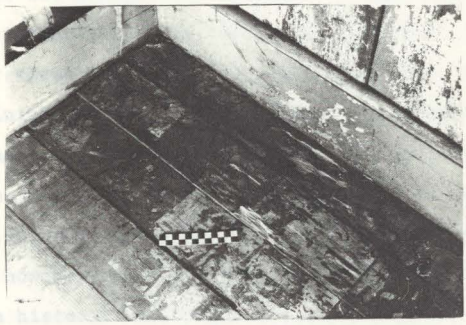


Fig. 19. Deteriorated are in southwest corner of parlor floor. (scale = 6")

The affected portions of these boards should be removed and patched using new material to match.

The parlor floor also has a large stained area along the east wall believed to have been caused by animal urine. This area should be cleaned using the gentlest means

possible. When cleaning, always begin by using the gentlest cleaning solution, such as mild soap and warm water. If this is not sufficient move up to a slightly stronger cleaner, and so on. Make sure to do a test patch in a small, inconspicuous area before using any cleaner on the entire surface to be cleaned. Use of harsh cleaners such as lye are not recommended because they will bleach the wood and raise the grain.

The floor in the parlor has never had a finish applied to it, but has always been covered with rag rugs, linoleum, and most recently a large (nearly wall to wall) wool carpet. For these reasons it is recommended that the floor be left unfinished and that a new carpet be installed.

The floor of the parlor slopes to the north, most likely the result of differential settlement. some of this may come out when the house is placed on the new foundation. Remember however, some differential settlement is to be expected in historic buildings, and unless the sloping floor is structurally unsound , or interferes with the continued use of the room, it is unnecessary and unwise to attempt to make the floor perfectly level.

Inspection of the closet area under the stairs showed a damp area along the east wall. This is caused by water entering the house through the failed roof and running down the insides of the walls. There is some white surface growth in this area but deterioration is minimal at this time.

Repair of the roof and sealing of the exterior trim and siding will remove the water problem and the fungul growth will die. The small spots of rot found here can be repaired with a filler.

The floor in the downstairs bedroom is in good condition, but the linoleum covering it is aged and worn. The linoleum should be removed (saving a sample with full pattern repeat for documentation purposes), the floor should be cleaned, and then a clear finish should be applied for protection. Varnish or shellac is recommended because they will move better with the floor. Polyurethane is very hard and does not move well (expand and contract), therefore it is not recommended for softwood floors such as this.

There is currently an 8" wide varnished border around the edge of the floor. The new finish should match this as closely as possible. The floor was apparently covered by an area rug at one time, with a varnished border around the edge. Varnishing the floor will protect it, and will allow future residents to place area rugs as desired.

The floor in the dining room is in good condition except for a few small areas of rot along the west side of the floor (see Figure 20), and areas of heavy wear in front of the doors and under the hung chimney where a wood stove used to be located.

The rotted areas should be patched with new material to match, and the floor should be cleaned and painted.

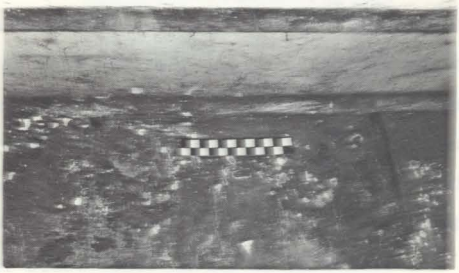


Fig. 20. Small deteriorated areas on west wall of the parlor floor.

Fig. 21. Patch of false graining on parlor floor.

The present "linoleum carpet" should be removed, saving a sample for documentation purposes.

The area of the floor under the linoleum carpet has never been finished, but the border of the room has been painted. As with the bedroom, painting the floor will protect it, and will allow future occupants to use area rugs of a size different than that of the linoleum carpet.

When painting the floor you should not paint over the small patch of false-graining in front of the bedroom door on the east side. This should be preserved (see Figure 21).

The kitchen floor is in by far the worst condition of all the floors. There is extensive damage caused by brown rot on the west half of the floor. As can be seen in Figure 22, this rot has progressed through both layers of flooring in a large area.

The east half of the floor is covered with many layers of linoleum, all of which are badly worn. In front of the east door, under the linoleum, the floor is quite damp. This area is covered with the white surface growth and hyphae of a decay fungus, and deterioration has begun (see Figure 23).

The floor under the built-in cabinet in the northeast corner of the room is also wet and white surface growth is present as well. This area has probably become wet from water from the porch advancing up the floorboards through capillary action of the wood.

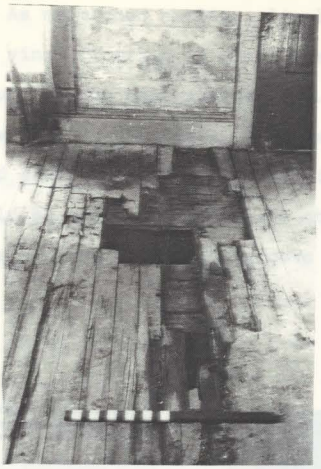


Fig. 22. Deterioration on the west half of the kitchen floor.

The section of flooring on the south wall under the sink has also rotted through both layers of flooring.

Considering the severly deteriorated state of the kitchen floor it is recommended that the entire floor be removed and that a new floor be installed. The new floor should be constructed using subfloor grade plywood for the bottom layer, and floor underlayment material for the top layer.

Samples of all linoleum patterns should be saved for documentation purposes.

The new floor should then be covered with a vinyl

floor covering. As mentioned earlier, linoleum is no longer produced, but if vinyl flooring is available in reproduction patterns this would be the best alternative. It is believed that when the new tongue-and-groove floor was installed c. 1930, it was, and always has been, covered with linoleum. Therefore it would be inaccurate to leave the floor uncovered, or to install a new tongue-and-groove floor and apply a clear finish.

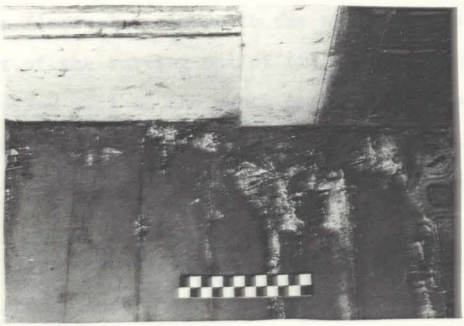


Fig. 23. Hyphae and white surface growth of a decay fungus along the east side of the kitchen floor. (scale = 6")

The floor of the south bedroom upstairs has a heavy stain in the northwest quarter of the room. This is most likely a urine stain and should be treated in the same manner as the stain in the parlor.

The floor in this room is damp along both the east and west walls, and a small amount of white surface growth is present. The deterioration is minor at this point and has been caused by water entry from the failed roof. Sources of water entry should be sealed, and deteriorated areas should be patched using new materials to match.

The southeast corner of the floor in this room is quite soft and springy. It is advised that you further inspect the floor joists in this area to make certain that they have not pulled out of the ribbon strip on the east side.

The floor also slopes to the south. This is probably the result of the cutting out of the lower portion of the original plank wall on the south end of the house when the kitchen addition was built, and subsequent failure to add sufficient structural support to compensate for removal of the wall.

It is recommended that a registered architect or engineer be consulted to determine whether or not additional support may be required in this area. If additional support is necessary, it should be added in a manner which does not disturb the historical integrity of the house.

The north bedroom upstairs has problems similar to those found in the south bedroom. The southwest corner, northeast corner, and west side of the floor show signs of water entry, i.e. dampness, water stains, and the white surface growth of decay fungi. This floor should be cleaned and

all sources of water entry sealed to prevent future entrance of moisture.

The floors in both bedrooms have never had any type of finish applied. They are presently covered with rag rugs which have rotted. It is recommended that the floors remain unfinished, and that area rugs be used to cover them in the future.

Walls

Because the front portion of the building is of box construction the plank walls of this section serve a dual purpose; they are major structural components of the building, and the inside surfaces are the walls of the rooms. Therefore it is important for them to be maintained in sound condition. Exterior plank walls are found in the parlor (west and north), entry hall (north and east), downstairs bedroom (east and south), and dining room (one-half of the west wall). The east wall of the parlor, north wall of the downstairs bedroom, south wall of the entry hall, and east wall of the dining room are interior plank walls.

Water stains and white surface growth are found along the entire length of the west wall of the parlor, the worst area being the northwest corner of the room. Also, blackberry vines were found growing under the wallpaper in the northwest corner of the room (see Figure 24), an indication

of the amount of overgrowth that had been allowed to spread around the house.

The wallpaper in this room has suffered water damage and much of it is no longer adhering to the walls. Wallpaper was also removed in many areas during the investigation of the house. The remaining sound wallpaper should be left on the walls for future documentation purposes.

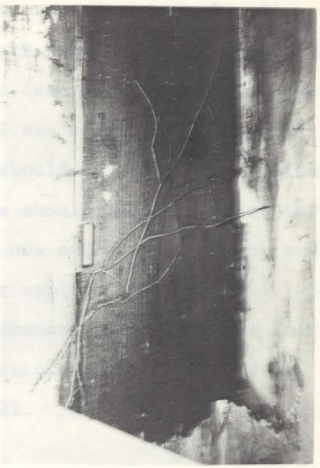


Fig. 24. Northwest corner of the parlor wall. Vine is growing up the inside of the wall.

The walls should be cleaned to remove all fungul growth and vines, entry points for water should be repaired and sealed, a vapor barrier should be installed on exterior walls, and the walls should be recovered with wallpaper. Wallpaper is recommended here because it is the only type of wallcovering the room has ever had, other than a coat of paint over the wallpaper sometime in the 1930's.

The thinness of the plank walls is a significant aspect of the historical character of the interior, and every effort should be made to retain that character. For this reason, the addition of modern materials such as

sheetrock is not recommended for any of the plank walls.

The east wall of the entry hall is water stained and white surface growth is present (see Figure 25). The recommendations for the entry hall are similar to those for the parlor; some of the wallpaper should be retained as a record for future documentation, walls should be cleaned, rotted areas should be repaired using new material to match, and vapor barrier and new wallpaper applied.

The plank walls in the downstairs bedroom are in sound condition and the above recommendations should be followed for these walls as well.

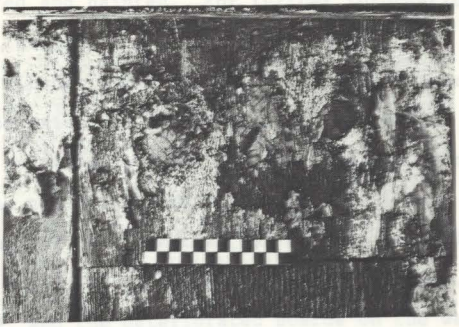


Fig. 25. Fungul growth on the east wall of the entry hall. (scale = 6")

the dining room walls are covered with horizontal boarding which has many layers of paint, on top of which is a layer of plain brown cartridge paper and more layers of paint. Moisture has caused most of the paper to come off and has also caused the failure of much of the paint, especially on the south and west walls. The west wall and southwest corner of the room are heavily water stained, an indication of water infiltration over a long period of time. There is also a gap in the west wall at the point where the plank wall and the stud wall meet.

It is recommended that the remainder of the cartridge paper be removed from the walls (saving a sample for documentation), and that the walls be thoroughly cleaned, and then prepared and painted. For further information see section V I, Paints.

The kitchen walls are also covered with horizontal boarding and painted. The west wall and the west end of the south wall are heavily water stained, and the paint has failed. The top two boards on the west wall have rotted due to the amount of moisture that has entered the wall.

The walls in the kitchen should be cleaned, prepared, and painted, and the deteriorated boards on the west wall should be replaced with ones of new material to match.

These same horizontal board walls are found in both upstairs bedrooms as well. The east and west walls of these rooms are heavily water stained as can be seen in Figure 26.

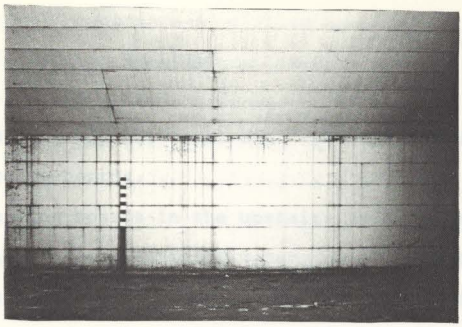


Fig. 26. West wall of north bedroom upstairs showing extensive water stains.

Also, the top wallboards on the west side of both rooms have rotted.

The rotted wallboards should be replaced with ones of new material to match, and all walls should be cleaned, prepared, and painted. Due to the difficulty of installing a vapor barrier behind these walls, the use of a vapor barrier paint should be given consideration.

It is recommended that while wallboards are removed for repair, further inspaection of the tops of the wall planks, upper ribbon strip, and wall furring strips be carried out. The top wall boards on the east wall should also be removed for this reason, taking care to do as little damage as possible to them. Any deteriorated members that are found should be repaired or replaced using new materials to

match.

Ceilings

The ceilings in all rooms are 7/8" x 5" (typical) tongue-and-groove boards.

The ceiling boards in the upstairs bedrooms are water stained, indicating the entry of water. One ceiling board on the west side of the south bedroom was removed and was found to be covered with a thick layer of white surface growth, leaves, and other organic matter (see Figure 27) which has entered through the failed roof over a long period of time.

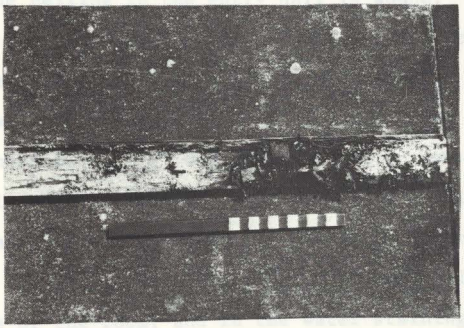


Fig. 27. Ceiling board taken from the west side of the south bedroom upstairs. Note the large amount of white surface growth and leaves.

Since it was not possible to inspect the back sides of the remaining ceiling boards it will be necessary to do so when the roof shingles are removed for replacement. At this time all organic matter should be removed from between the ceiling boards and the roof sheathing, and any boards found to be deteriorated should be replaced with ones of new material to match. When repairs are completed the ceilings should be cleaned, prepared, and painted. As with the walls in the upstairs bedrooms, paint has been the only material ever used to cover the ceilings, therefore it should be used as the covering when rehabilitation work is done. Because of the difficulty of applying a vapor barrier to the back side of the ceiling boards, a vapor barrier paint should be considered for use here also.

The ceiling in the entry hall is sound. The wallpaper on the ceiling however is in poor condition and should be removed. The ceiling should then be cleaned and prepared, and new wallpaper should be applied. Wallpaper is recommended here because it was the covering in use during the time period being used as the basis for rehabilitation.

The entry of water on the west side of the parlor has resulted in the deterioration of the first ceiling board on that side of the room, and in the water staining and deterioration of the wallpaper on the ceiling.

The deteriorated ceiling board should be replaced with a new one using new material to match. The wallpaper should

be removed, saving some for future documentation, and new wallpaper should be applied. It is necessary to put new wallpaper on this ceiling in order to maintain the consistency of the rehabilitation. Since the c. 1904 alterations this ceiling has been covered with wallpaper, therefore it should be used during the rehabilitation so that the look of the room is accurate.

The ceiling boards on the east side of the ceiling in the downstairs bedroom are water stained but still serviceable. The first board on this side should be removed so that inspection of the east end of the second floor joists can be carried out. Take care to avoid damaging the board during removal. After inspection the original board should be put back in place and the ceiling should be cleaned, prepared, and painted. The ceiling has always been painted in this room and therefore it should continue to be.

The southwest corner of the dining room ceiling is water stained and some of the ceiling boards are sagging. These boards are still sound however, and should be renailed and left in service.

The entire ceiling should be cleaned, prepared, and painted, with the ceiling patch on the north end of the ceiling left exposed. An attempt should not be made to hide the patch by installing new ceiling boards and staggering the joints. The ceiling was painted and the patch was exposed from the time the staircase was removed until

sometime in the 1930's. Therefore leaving the plain cartridge paper off the ceiling, and leaving the patch exposed will accurately represent the room c. 1930. The ceiling patch should not be altered because it is evidence of the change that took place with the staircase.

As is the case with the floors, the kitchen ceiling is in the worst condition of all the ceilings. Water entering through the failed kitchen roof over a long period of time has resulted in the deterioration and failure of several of the ceiling boards on the west side of the kitchen (see Figure 28). These boards should be removed and replaced with new boards using new material to match.

Fig. 28. Deteriorated ceiling boards on the west side of the kitchen ceiling.

The kitchen ceiling is presently covered with a type of canvas that is secured with strips of lath, and painted. This appears to be a much later treatment, similar to the cartridge paper found in the dining room, and should be removed because it is badly deteriorated. The ceiling should then be cleaned, prepared, and painted.

Interior Trim and Cabinets

The interior trim is in good condition and primarily needs to be cleaned and painted. Any loose pieces of trim should be refastened. If the original nails cannot be re-used new nails which resemble the originals should be used.

The cabinets on the south and east walls of the kitchen are in good condition and can be left in service with only cleaning and painting required.

The two cabinets against the north wall of the kitchen are also serviceable and should be retained. The exteriors of these cabinets are finished with false graining and should be cleaned only. This false graining is a significant part of the historical character of the interior and every effort should be made to preserve it.

When cleaning always begin by using the mildest method (damp soft cloth, mild soap, warm water) and work up, always doing a small test patch in an inconspicuous area before applying any cleanser to the entire area to be cleaned.

For further information on paints and graining refer to Paint Color Research and Restoration of Historic Paint, compiled by Kevin H. Miller, and available from the Association for Preservation Technology. Also, see The Old House Journal, March 1983, page 49.

Hardware

The hardware on doors, windows, and cabinets is in good condition and should be retained. Hardware with moving parts such as rimlocks (see Figure 29) and cabinet latches, should be removed,cleaned,and lubricated with a light oil. Hardware that is currently operating satisfactorily should not be removed.

When removing hardware it is important to work slowly and carefully to avoid damage to both the hardware itself as well as to the article the hardware is mounted to. If hardware has been painted over begin the removal be cutting around the edges of the piece of hardware down through all of the paint layers. This will prevent the breaking off of large areas of paint when the hardware is removed. Use caution to avoid gouging the hardware and wood behind it. Be certain to use a screwdriver that fits properly in the slots of the screws being removed. It may be necessary to grind a screwdriver tip to fit specific screws. All hardware should be labeled to make sure that it is returned to

its original location. Positions of screws should be marked as they are removed to insure that they are reinstalled in the same holes that they were removed from.

If new security, or other hardware, is installed as part of the rehabilitation, care should be taken to select a style that is sympathetic to the original hardware.

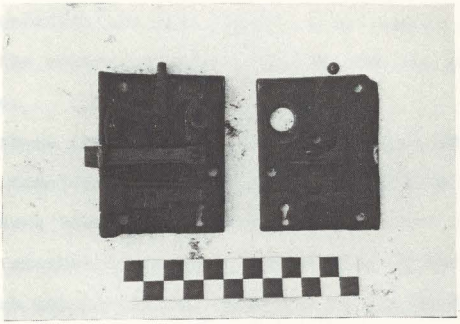


Fig. 29. Example of type of rimlock used in the Cooley Cottage.

Doors

The interior doors are in good condition needing only cleaning and painting. Door faces that are painted should be cleaned, prepared, and painted. Those doors with faces that are grained or varnished should only be cleaned. Cleaning should be done using the gentlest means possible. Refer to the section on interior trim and cabinets for further

information.

Bathroom

The c. 1919 bathroom addition has been poorly maintained and is in a severe state of deterioration. The framing, floors, walls, ceiling, and roof have deteriorated to the point where they must be almost totally replaced. The bathroom foundation has also failed, resulting in the separation of the entire bathroom addition from the south end of the house.

For these reasons it is recommended that the present bathroom be demolished and that a new bathroom be constructed in the same location. To place the bathroom inside the house or in another location on the outside of the house would disturb the historical integrity of the house to a great extent and is not recommended.

The design for the new bathroom should include space for a utility room which could house a washer and dryer, and make some storage space available. As mentioned earlier in the discussion of the foundation, the house presently has very little storage area, and has no place to put modern utilities and conveniences. The incorporation of these things into the new bathroom addition would eliminate the need to put them inside the house, therefore preserving the historical integrity of the house.

the new addition should be compatible with the scale and character of the property, neighborhood, and environment. Careful consideration should be given to such things as window size and placement, style of siding, roof pitch and covering, and trim details.

Chimneys

The chimneys in the dining room and kitchen are of the single brick thick, unlined, hung type. They do not conform to modern fire safety requirements and it is therefore recommended that they not be used to vent solid fuel burning appliances such as woodstoves without first having a complete safety inspection.

If the use of the present chimneys is not allowed by fire and building officials, but the use of solid fuel burning appliances is desired, then the present chimneys should be dismantled and rebuilt. They should be rebuilt using a liner and incorporating a sound footing. The historic brick should be reused, and every effort should be made to keep the rebuilt chimneys as close to the present size and style as possible.

New chimneys, including metal ones, should not be built in new locations in the house. Their presence in a new location will disturb the visual integrity of the house.

Utilities

Electrical

The present electrical system consists of a 30 amp service and knob-and-tube wiring. There is a 2¼" diameter ceramic fixture in the center of the ceiling of each room. From these fixtures hang wires at the end of which is attached a light socket operated by pull chain. There are currently no electrical outlets other than adapters which are plugged into the light sockets. All wiring is 110 volt, the house having never been wired for 220 volt service. This system is inadequate to meet the future needs of the house and should be upgraded to modern standards.

When installing a new electrical service and rewiring the house, great care should be taken to preserve the historical integrity of the house, both interior and exterior. Consideration should be given to: running the feed from the street to the house underground; placing the new service box and meter in locations where they do not disturb the visual integrity of the house but are still accessible; running as much wiring as possible in concealed spaces; placement of electrical outlets where they intrude the least and do the least amount of damage to historic fabric; and choosing fixtures that are sympathetic to the interior and exterior of the house.

When installing electrical wiring avoid drilling holes through structural members unless absolutely necessary. This destroys historic fabric and weakens the members. If it is necessary to drill keep the number of holes, and their size to a minimum.

Plumbing

The present plumbing system is in a severe state of deterioration and should be replaced entirely. The plumbing to the kitchen sink has been removed, feed pipes to the bathroom are broken, the 4" cast-iron waste pipe from the toilet is broken, all drains are broken, and the toilet is broken.

The plumbing runs through the south wall of the house and has contributed to the deterioration of structural members in this area. Figure 30 shows the present condition of the plumbing in the south wall of the kitchen.

The hot water system consists of galvanized tanks in the attic over the kitchen. The water was most likely heated by copper coils which ran through the wood cookstove below, though none of this system currently exists.

An entirely new, modern plumbing system should be installed as part of the rehabilitation. But, care must be taken to prevent unnecessary intrusion into the house, and disturbance of the historical integrity of the house.

The new system should: (1) be hooked up to city

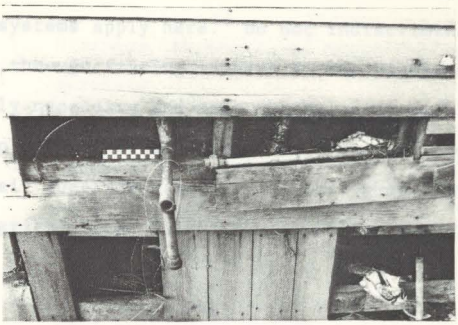


Fig. 30. Deteriorated condition of the plumbing which runs through the south wall of the house.

sewer and water services, (2) provide for the present and future needs of the building, (3) use fixtures that are sympathetic in design. The kitchen sink, bathroom sink, and bathtub should be reused if possible. This will reduce the cost of fixtures, and these fixtures are already sympathetic in design.

A new water heater needs to be installed as there is presently no system in the house. The new water heater should not be installed in the attic over the kitchen unless additional structural support is added to the attic framing system. A better location for the water heater is in the crawl space or cellar which is created by the new foundation, or in the new bathroom addition. These locations will not take up valuable space inside the house, and are much less likely to disturb the historical integrity of the house.

The same cautions mentioned for the installation of electrical systems apply here. Do not indiscriminately drill holes through framing members to run pipes, drill only if absolutely necessary and keep the holes as small as possible. Run plumbing vents through roofs only if necessary, and plan their location carefully so that they disturb the visual integrity of the building as little as possible.

Heating

A central heating system has never been installed in the Cooley Cottage, heating being done historically by fireplaces and woodstoves. However, a modern central heating system should be installed as part of the rehabilitation. This will provide a more constant level of temperature and humidity, and will be of benefit to both the building and the occupants.

With the interior space of the house already limited, care should be taken to be certain that the installation of the heating system does not impose on this space, and threaten to disturb the historical integrity of the interior space. The location of the heating unit must be given careful consideration. The best location would be under the house in the newly created cellar or crawlspace.

As with electrical and plumbing, installation of the heating system should be done in the least intrusive manner

possible. The following guidelines should be followed:

1. Minimize the number of vents coming through roofs. Keeps vents as incospicuous as possible.
2. Keep ducting and wiring as hidden as possible.
3. Minimize the loss of historic fabric by careful planning, and by drilling and cutting only when absolutely necessary. Keep the number of hole drilled, and the size of holes in structural members to a minimum.
4. Make sure that the weight of the installed heating system does not overburden the present structural system.

Vapor Barriers-Ventilation

Proper vapor barriers should be installed in the living areas of the house to help resist the movement of water vapor into the wall cavities of the building where it can condense on colder surfaces and cause serious damage. They will also help reduce the infiltration of air and minimize drafts, making the house more comfortable during the colder months.

Vapor barriers should be installed on the warm side of all exterior walls, floors, and ceilings, and in the crawl space under the house.

Installation of proper ventilation is also important in minimizing the buildup of water vapor and reducing the possibility of harmful condensation occurring. Ventilation

should be provided for the eaves, rafter spaces, and attic spaces. Vents should be installed as inconspicuously and sympathetically as possible in order to minimize intrusion into the visual integrity of the house.

Good sources for further information on vapor barriers and ventilation include Construction: Principles, Materials, & Methods, by Olin, Schmidt, and Lewis, and Condensation Problems in Your House: Prevention and Solution, by the U.S. Department of Agriculture, Forest Service, Agriculture Information Bulletin No. 373.

Insulation-Weatherization

The house is currently uninsulated, but insulation should be added as part of the rehabilitation to provide a higher level of occupant comfort and reduce heating expenses. Insulation should be installed in and under floors, and in the ceilings. Most of the heat loss in the house occurrs through the ceilings and roof, so insulating these areas will reduce the loss and add considerably to the comfort of the house. It is not recommended that the walls be insulated because of the problems inherent in retrofitting insulation in old walls. First of all, in order to get the insulation in the wall cavity you have to remove the siding or cut holes in the historic fabric to pump it in, and secondly, the condensation problems created by the

installation of insulation are greater than the amount of heat saved.

The plank walls in the front section of the Cooley Cottage also present a special problem. There is no wall cavity to put insulation into, and as mentioned earlier, the thinness of the walls and the depth of the window and door trim combine to form one of the significant aspects of the interior of the house. To preserve this it is recommended that no insulation be used on the exterior plank walls. Instead, the gaps between the planks should be filled with some sort of insulating material and a vapor barrier installed to minimize air infiltration. These measures, combined with insulation in the floors and ceilings and other weatherization procedures should provide for an adequate level of comfort.

Weatherstripping should be installed on all windows and doors, and wooden storm windows and doors of a compatible design should be built and installed. The storm door that is seen on the front door in Figure 8 could be used as a model for the design of the new storm doors and windows.

Outbuildings

The fruit/milk house and the woodshed were added to the house in the last quarter of the nineteenth-century. These buildings are significant additions in the history and

development of the house, as well as being a significant part of the house visually. This significance should be recognized and respected throughout the course of the rehabilitation.

Woodshed

Maintenance of the woodshed has been neglected for many years, resulting in serious deterioration of much of the building fabric. Because the deterioation is so extensive the woodshed should be dismantled and rebuilt, salvaging as much of the historic fabric as possible.

Before being dismantled, the structure should be completely documented, and all pieces should be labeled to insure that they are reinstalled in their proper positions.

Many of the problems are the result of the structure not having a proper foundation. The posts sit on stones with no moisture barriers between the stone and post. This allows moisture to wet the posts, eventually leading to deterioration due to attack by decay fungi and insects.

In this instance, the easternmost post on the south side of the woodshed is rotten in the center for quite some distance up the post, and the center post on this same side is infested with subterranean termites. The center post of the north side also has termites, and the east post of the north side has rotted.

For further information about treatment of the termites contact the Entomology Extension Service at Oregon State University. Subterranean termites are a serious problem and treatment of them should be left to professionals.

Carpenter ants are also found on and around the woodshed and the grounds on the eastern side of the house. These carpenter ants are of the species Camponotus vicinus. This particular species is primarily a ground nester and is not considered a structural pest. they should be removed however to prevent damage to plantings, and future infestation of the house. For information about the control of these ants contact the Entomology Extension Service at Oregon State University.

The deteriorated portions of all posts should be removed and new sections, using new materials to match, should be spliced on. This method will preserve as much of the historic fabric as possible. Any posts that are too deteriorated and cannot be saved should be replaced using new material to match.

Footings should be installed under the stones at the bottom of all posts, and proper moisture and insect barriers should be installed between the stones and the bottom of the posts.

The beam on the north end of the woodshed is severly deteriorated and should be replaced entirely with new material to match (see Figure 31).

Fig. 31. Deteriorated beam at the north end of the woodshed.

Fig. 32. Deteriorated mortise and tenon joint on the north side of the woodshed.

The center beam and the southern beam have very little bearing on the posts that they tie into. The mortise and tenon joint at the north end of the easternmost beam has deteriorated and the wooden peg holding the joint together has rotted and broken, allowing the beam to pull out of the post as seen in Figure 32.

The southern end of this beam doesn't bear an a post at all. Instead, it butts up against a post and is secured by nails on the west side of the beam, and by a 1 x 6 board nailed to both the post and beam on the east side as seen in Figure 33 and Figure 5.

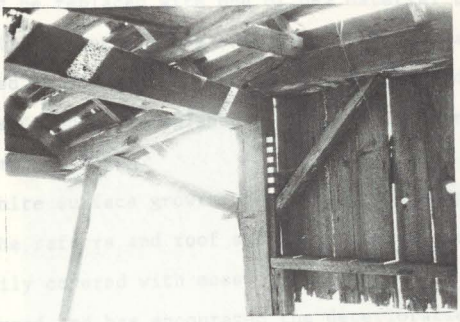


Fig. 33. Photo shows broken top plate and poor connection between post and beam.

The joint on the north end of this beam needs to be repaired using new material to match, and the connection on the south end needs to be reinforced.

As can be seen in Figures 5 and 33, the top plate on the south side of the woodshed has broken at its eastern end, directly over the post at that end. There is also a rotten area at the eastern tip of the top plate, and the brace from the top plate to the post at the east end has rotted and broken.

The east end of the top plate should be cut off behind the break and a new section spliced in using new material to match. The deteriorated brace should be replaced with one of new material to match.

The 2 x 6 plate across the front of the woodshed is broken on the north end and rotted on the south end. This member should be replaced with one of new material to match.

The first three rafters on the south side, east end, have developed considerable bows and their lower ends have rotted. These should be replaced with new ones using new material to match.

The white surface growth of a decay fungus appears on many of the rafters and roof sheathing boards, and the roof is heavily covered with moss. This moss holds moisture against the roof and has encouraged the deterioration of the roof. Many of the shingles on the roof are missing, and those that remain are deteriorated and no longer serviceable as can be seen in Figures 34 and 35.

All of the shingles should be removed and replaced with new wood shingle to match those ot the house.

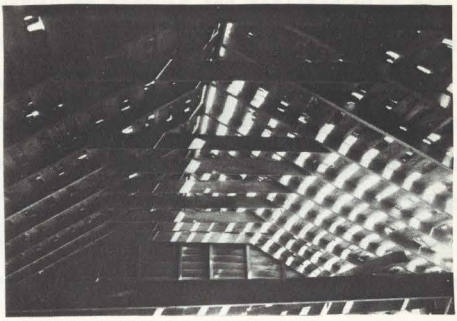


Fig. 34. View looking up at inside of woodshed roof. Note the number of shingles that are missing.

Fig. 35. View of north side of woodshed roof showing thick layer of moss.

All flashing should be removed and replaced with new material, and deteriorated sheathing boards should be replaced with ones of new material to match.

The vertical boards and battens at the west end of the woodshed are sound at the top but have deteriorated at the bottom. These should be salvaged and reused by cutting the affected areas out and reinstalling in a shorter space. Replace longer ones as needed using new material to match.

Fruit/Milk House

This building has also suffered due to a lack of maintenance and is presently in poor condition.

Many of the bricks in the building are spalling and have deteriorated severly. This problem is most serious on the northeast corner of the building as seen in Figures 36 and 37.

All deteriorated bricks should be replaced with sound bricks that match the originals in size, color, and texture. It will be difficult to match the brick perfectly, but every effort should be made to produce as close a match as possible. When replacing bricks the so-called rustic or early American look , where light and dark used bricks are interspersed in a wall, should be avoided. Due to the extent of the deterioration it may be necessary to dismantle the east wall of the building to carry out repairs.

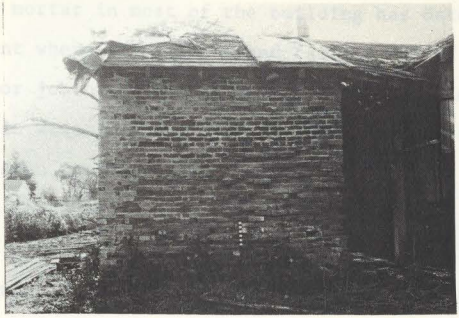


Fig. 36. East wall of fruit/milk house .

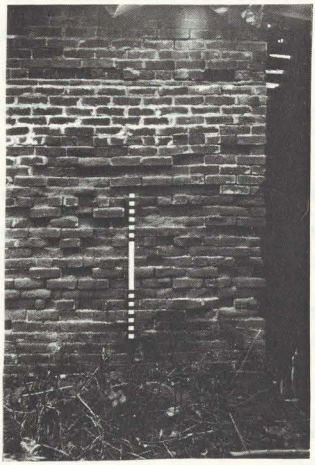


Fig. 37. Close up of east wall shows severity of spalling.

The mortar in most of the building has deteriorated to the point where it is loose and falling out of the joints. Also, a poor job of pointing was done at an earlier date, resulting in wide joints and mortar on the faces of many bricks as seen in Figure 36.

All loose mortar should be removed and the building repointed with a mortar that matches the original in color, texture, and strength. Extremely hard and strong mortars which have a high content of portland cement are not recommended.

On the interior, the stucco which covers the walls has failed because the bricks that the stucco adheres to have failed (see Figure 38). The deteriorated bricks should be replaced and a new coat of stucco applied to match the old. Because these bricks are going to be covered with a coat of stucco and will not be visible, it is not necessary that they match the originals exactly. They should however be of the same approximate hardness and strength so that they will expand and contract at the same rate as the originals.

The ceiling and roof of the building are badly deteriorated, as seen in Figures 37 and 38, and should be dismantled and rebuilt, salvaging as much of the historic fabric as possible. Documentation similar to that described for the woodshed should be carried out prior to dismantling.

To help prevent future damage from rising damp, it is recommended that a damp-proof course of some type be installed

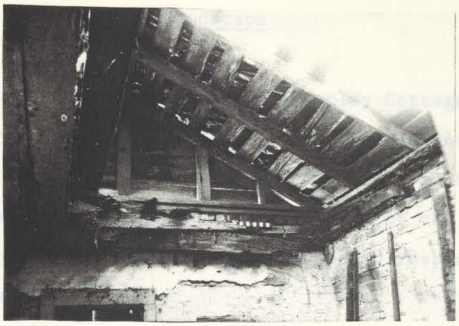


Fig. 38. Interior of fruit/milk house.

in the walls. Precautions should also be taken in areas where wood comes in contact with brick, such as the top plates, by adding barriers which prevent moisture from traveling into the wood, and details that help the wood to dry if it does become wet.

Other measures include removing the pile of ashes on the south side of the building, and cutting back growth at the base of the building. Both of these things hold moisture against the building and cause the types of failures which have taken place.

For further information on repointing and cleaning of brick and masonry refer to Preservation Brief 1, "The Cleaning and Waterproof Coating of Masonry Buildings", and Preservation Brief 2, "Repointing Mortar Joints in Historic Brick Buildings". These briefs are available from the State Historic Preservation Office.

Site-Landscape

The landscape surrounding the Cooley Cottage has historically linked the building to its environment. Because of this the landscape must be considered as having significance in the history and development of the building. As such, any changes made to the site should respect this significance.

Plantings such as the fruit trees, lilac bushes, and other decorative plantings should be retained. New fences should be designed to be compatible to the site in scale, design, and placement. A fence such as the one seen in Figure 7 could be used for reference. Chain link and other modern style fences are not recommended.

Additional parking, if needed, should be located as unobtrusively as possible, and cause the least amount of alteration to the features of the landscape. It is recommended that the present woodshed be used as a carport area in the future. This eliminates the need to alter the site for parking or for a driveway.

Proper drainage needs to be designed and built into the site so that water is carried away from the house and the site remains dry. A landscape architect with experience in historic preservation should be consulted on these matters.

Preventative Maintenance

A preventative maintenance program should be established to provide direction for the future maintenance of the building. This program should establish a time frame by which routine maintenance is carried out. This will help to insure that the house does not deteriorate in the future, and should establish guidelines by which the work is done. In order for historic fabric to last it must be treated with care and properly maintained. For further information about establishing a preventative maintenance program refer to Cyclical Maintenance for Historic Buildings, by J. Henry Chambers.

VI

PAINTS

The paints and finishes of the Cooley Cottage are as significant a part of the house as the rest of the building fabric and this significance should be recognized and respected. Paint should not be removed unless absolutely necessary as this destroys evidence which may be valuable in the future. As methods of analysis become more advanced these paint layers will be able to tell more about the history of the house than we can find out using present day procedures. The layers of paint, like the layers of wallpaper, tell a story of the history of the house and its occupants and every effort should be made to preserve them.

Exterior Analysis

Analysis of the paint on the exterior of the Cooley Cottage was undertaken in order to determine the paint colors that had been used on the house throughout its history, and as an aid to the dating of alterations and additions.

Paint samples were removed from the house and microscopically analyzed, with each paint layer, and its corresponding Munsell color notation, recorded on the sheets at the end of this section. The Munsell color notations were taken from the Munsell Book of Color, and are standardized notations which refer to the hue, value, and chroma of each color.

As can be seen from the charts, the body of the house has always been painted white. The trim of the house was originally white, although it is presently a light yellow-green. This change is believed to have occurred sometime between 1907 and 1933. In Figure 7 the house appears monochromatic, but in Figure 8 the trim of the house appears to be a darker color than the body, most likely painted green sometime before the photograph was taken. One thing that is confusing about the trim color is that a piece of trim, believed to be from the eave return on the south end of the house and found in the attic over the kitchen, is painted green. If the trim was not painted green until after 1907, but the kitchen addition was built in 1858, why is this one piece of trim painted with green as its only coat?

The upper sash on the front of the house was the only one tested because it is believed to be an original. The sash was originally painted white, but is presently a medium red.

It is recommended that the entire house, including

all trim except for the sash, be painted white. The sash should be painted a darker color such as a red similar to that presently on the upper sash on the front of the house, or a dark green-black. This color combination is one that was extremely popular for the painting of Classical Revival style houses such as the Cooley Cottage.

As an aid to dating and understanding the changes which occurred in the house the paint analysis was very successful. For instance, sample 19 shows that the south side of the original house had only one coat of paint on it before it was covered over by the kitchen addition, whereas the weatherboard from the front of the house in sample 15 has five layers of white paint and two layers of clear primer. This evidence supports the thought that the kitchen addition was added soon after the house was moved to its present site.

Also, the difference between the number of layers in samples 14 and 15, both taken from the weatherboards on the front of the house, indicates that the weatherboard in sample 14 is newer. As mentioned earlier, it was believed that these weatherboards were probably changed c. 1904 when the alterations to the front door and window occurred.

Preparation of the house should begin with a cleaning to remove as much accumulated dirt as possible. A solution of warm water, chlorine bleach, and tri-sodiumphosphate can be used to remove the mold growth. As mentioned earlier this solution can cause mild burns and should be

used carefully. Protective clothing and eyewear should be worn. Low pressure spraying with a garden house will remove much of the dirt. All paint that is not adhering tightly to the wood must be removed in order for the new paint to adhere. Peeling, cracking, and bubbled paint can be removed by scraping and wire brushing. Power tools such as disc sanders and wire brushes attached to power drills should not be used as they have a tendency to gouge woodwork no matter how well you believe you have them under control.

When all paint has been cleaned and scraped apply one coat of oil-base or alkyd primer to the entire house. The prime coat should be followed by a top coat comprised of two thin coats, rather than one thick coat, of high quality oil-based exterior paint. The use of two top coats will best reproduce the texture that would have been present when the house was painted in the past, and will result in a better, longer lasting finish.

For further information refer to Preservation Brief 10, "Exterior Paint Problems on Historic Woodwork". For further information on historic paint colors and their use refer to Century of Color: Exterior Decoration for American Buildings - 1820/1920, by Roger Moss.

Many manufacturers currently produce historic paint colors and will send sample colors upon request. The following is a partial list of manufacturers.

Devoe & Raynolds Co.
4000 Dupont Circle
Louisville, Kentucky 40207

The O'Brien Corporation
South San Francisco, California
94080

Benjamin Moore & Co.
Montvale, N.J.

Allentown Paint Manufacturing Company, Inc.
Graham and East Allen Streets
P.O. Box 597
Allentown, Peensylvania 18105

Finnaren & Haley, Inc.
2320 Haverford Rd.
Ardmore, Pennsylvania 19003

The Martin-Senour Company
1370 Ontario Avenue, N.W.
Cleveland, Ohio 44113

The Sherwin-Williams Company
101 Prospect Avenue
Cleveland, Ohio 44115

Sample color charts of the major manufacturers paint colors should be available through local distributors. These would include Sherwin-Williams, Martin-Seynour, Benjamin Moore, and Fuller O'Brien. Sample charts from the other manufacturers are available upon request.

PAINT LAYER (from top)	SAMPLE LOCATION AND NUMBER				
	1 clapboard east side kitchen	2 vertical board siding west end of woodshed	3 south wall of east porch	4 west wall of east porch	5 north wall of east porch
	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	5Y 7/1 light yellow-gray
2	5Y 9/1 yellowish-white		5Y 9/1 yellowish-white	5Y 9/1 yellowish-white	5Y 9/2 yellowish-white
3	5Y 9/2 yellowish-white		5Y 9/2 yellowish-white	5Y 9/2 yellowish-white	clear primer
4					
5					
6					
7					

PAINT LAYER (from top)	SAMPLE LOCATION AND NUMBER				
	6 door trim south door east porch	7 door trim north door east porch	8 baseboard north wall east porch	9 weatherboard east side front under woodshed	10 weatherboard east side front under window
	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	5Y 7/1 light yellowish-gray	N9.25/-N9.5/ neutral white	10GY 7/2 light green-yellow	N9.25/-N9.5/ neutral white	5Y 9/1 yellowish-white
2	10GY 7/2 light green-yellow	10GY 7/2 light green-yellow	7.5YR 6/6 orange-beige	5Y 9/1 yellowish-white	clear primer
3		N9.25/-N9.5/ neutral white	7.5YR 7/4-7/4 orange-beige	clear primer	5Y 9/2 yellowish-white
4		5Y 9/1 yellowish-white	5Y 9/1 yellowish-white	5Y 9/2 yellowish-white	
5		5Y 9/2 yellowish-white			
6		7.5YR 7/2-7/4 orange-beige			
7		5Y 9/2 yellowish-white			

D50 Illuminant, 2 degree observer

PAINT LAYER (from top)	SAMPLE LOCATION AND NUMBER				
	11 window trim east side	12 bottom of entablature molding, E side front	13 molding at bottom of frieze E side	14 weatherboard N side between door and window	15 weatherboard N side bottom
	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	10GY 7/2 light green-yellow	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white
2	5Y 9/1 yellowish-white	10GY 7/2 light green-yellow	10GY 7/2 light green-yellow	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white
3	clear primer	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white		N9.25/-N9.5/ neutral white
4	5Y 9/2 yellowish-white	clear primer	clear primer		clear primer
5		5Y 9/2 yellowish-white	5Y 9/2 yellowish-white		5Y 9/2 yellowish-white
6					clear primer
7					5Y 9/2 yellowish-white

PAINT LAYER (from top)	SAMPLE LOCATION AND NUMBER				
	16 door trim front door north side	17 weatherboard N side, west of upper window	18 window sash north side upper window	19 weatherboard S side of original house in kitchen attic	20 window trim original south window in kitchen attic
	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	10GY 7/2 light green-yellow	N9.25/-N9.5/ neutral white	10R 4/10-4/12 medium red ochre	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white
2	N9.25/-N9.5/ neutral white	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white		5Y 8.5/1 yellowish-white
3	5Y 9/1 yellowish-white	5Y 9/2 yellowish-white			
4	clear primer				
5	5Y 9/2 yellowish-white				
6	5Y 7/1 light yellowish-gray				
7					

PAINT LAYER (from top)	SAMPLE LOCATION AND NUMBER				
	21 corner board NW corner under porch post	22 weatherboard N side under cornice return	23 corner board NW corner north side	24 weatherboard west side under north window	25 weatherboard west side under frieze
	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	5Y 9/1 yellowish-white	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	N9.25/-N9.5/ neutral white	10GY 7/2 light yellow-green
2	5Y 8.5/1 yellowish-white	clear primer	5Y 8.5/1 or primer	5Y 8.5/1 or primer	5Y 9/1 yellowish-white
3	5Y 8.5/1 yellowish-white	5Y 8.5/1 yellowish-white	5Y 9/1 yellowish-white	clear primer	note: the green found as the
4			5Y 8.5/1 or primer	5Y 9/1 yellowish-white	first coat here was probably carried over
5			5Y 9/2 yellowish-white	clear primer	when the trim was painted.
6				5Y 9/1 yellowish-white	
7					

	SAMPLE LOCATION AND NUMBER				
	26 molding, top of frieze west side kitchen	27 window trim west side kitchen	28 cyma reversa top of frieze E side front	29 frieze, east side front	
PAINT LAYER (from top)	MUNSELL NOTATION AND STANDARDIZED COLOR NAME				
1	10GY 7/2 light green-yellow	N9.25/-N9.5/ neutral white	10GY 7/2 light green-yellow	10GY 7/2 light green-yellow	
2	5Y 9/1 yellowish-white	10GY 7/2 light green-yellow	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white	
3	5Y 9/1 yellowish-white	5Y 9/1 yellowish-white	clear primer	clear primer	
4	clear primer		5Y 8.5/1 yellowish-white	5Y 8.5/1 yellowish-white	
5	5Y 9/1 yellowish-white		5Y 8/1 yellowish-white		
6					
7					

APPENDIX A

HISTORY OF OWNERSHIP OF THE PROPERTY

All deeds are recorded at the Linn County Recorders Office, Albany, Oregon.

January 8, 1877

Grantor: United States of America

Grantee: James A. Blakely & Wife

> ... certificate number six hundred fifty two of the Register and Reciever at Oregon City Oregon... Notification No 2629 has been established to a donation of One Section or six hundred and forty acres of land and that the same has been surveyed and designated as claim number fifty nine being parts of sections six and seven in township fourteen south of Range two west and claim number fifty one being part of section thirty one in township fourteen South of Range two west according to the official plat of survey returned to the General Land Office by the Surveyor General being bounded area described as follows...
>
> note: record of this Donation Land Claim was recieved and recorded in Washington, D.C. on November 27, 1865. The above date is when it was recorded in the LInn County records.

December 30, 1867

Grantor: James A. Blakely & Wife

Grantee: George C. Cooley

Lots 5,6,7 & 8, Block 10, Brownsville

November 26, 1906

Grantor: George C. Cooley & Wife

Grantee: Kitty Bailey

Lots 5,6,7 & 8, Block 10 Brownsville, described as follows:

Beginning at a point which is North 28.96 chains and East 7.50 chains distant from the Southwest corner of the donation Land Claim of James Blakely and Wife, Not. No. 2629, claim No. 59 in Township 14 South of Range 2 West of the Willamette Meridian, Linn County, Oregon and running from thence East 12.10 chains; Thence Northerly 8.38 chains to a point 19.00 chains East of the West boundary line of said claim; thence West 11.50 chains; and thence South 8.38 chains to the place of beginning, containing 9.88 acres more or less in Linn County, Oregon.

February 21, 1922

Grantor: Kitty Bailey

Grantee: Bonnie Ruth Bailey et al

same citation of land conveyance as above

note: property was conveyed on December 1, 1920 but was recorded later.

February 21, 1922

Grantor: W.W. Bailey et al

Grantee: W.C. Templeton and Wife

same citation of land conveyance as above

April 29, 1931

Grantor: First National Bank of Salem (acting as gaurdian of estate of George W. Bailey)

Grantee: W.W. Bailey

Lots 5,6,7 & 8, Block 10, Brownsville

August 22, 1940

Grantor: Ruth (Bailey) Ramstead

Grantee: W.W. Bailey

1/3 interest of Lots 5,6,7 & 8, Block 10, Brownsville

August 4, 1941

Grantor: W.W. Bailey and Edna

Grantee: Ruth and Gordon A. Ramstead

Lots 5,6,7 & 8, Block 10, Brownsville

September 25, 1941

Grantor: Ruth and Gordon A. Ramstead

Grantee: Edna Bailey and W.W.

same citation of land conveyance as above

June 2, 1966

Grantor: James Irvin Fox (Heirs Edna Bailey)

Grantee: Byron D. Fox

Lots 5,6,7 & 8, Block 10, Brownsville, and that portion of vacated Ash Street inuring to the above described property.

August 22, 1975

Grantor: Byron D. Fox

Grantee: Elizabeth Foster

lots 7 & 8, Block 10 Brownsville

September 23, 1982

Grantor: Elizabeth Foster

Grantee: Architectural Restoration Society (by trustee)

same citation of land conveyance as above

APPENDIX B

CONSTRUCTION-ALTERATIONS TIMELINE

1850's	House originally built.
1857	House moved to present site.
1858	Kitchen ell added.
1875-1900	Woodshed added, porch expanded, milk/fruit house built.
c. 1904	Fireplace, stairs, front entrance changed. Wall in downstairs bedroom moved. Wall added between parlor and dining room. Kitchen expanded into pantry. Front porch added.
c. 1910	Electricity added.
1907-1933	Sash in parlor and dining room changed from 6/6 to 1/1.
c. 1919	Bathroom added off south wall of kitchen.
c. 1930	New tongue-and-groove floor added over the original floor in the dining room, downstairs bedroom, kitchen, bathroom, and back porch.

APPENDIX C

DATES AND LOCATIONS OF NEWSPAPERS FOUND IN THE HOUSE

September 26, 1859	West wall of downstairs bedroom.
November 22, 1859	West wall of downstairs bedroom.
August 22, 1860	East wall of downstairs bedroom.
September 22, 1860	East wall of downstairs bedroom.
1862 (month & day unknown)	West wall of the entry hall.
June 1862	West wall of downstairs bedroom.
February 27, 1864	West wall of downstairs bedroom.
February 28, 1904	North wall of the stairwell.
1928, '29,'30 (many dates)	Spread under the linoleum in the downstairs bedroom.
1930 (many dates)	Under floor coverings in the parlor.
1931 & '32 (many dates)	Under the linoleum carpet in the dining room.

APPENDIX D

ROOM DESCRIPTIONS

Upstairs South Bedroom

Floor: 7/8" x 5" tongue-and-groove boards running north-south. Unfinished. Covered with rag rugs. Patch on north side of floor.

Walls: 7/8" x 5" tongue-and-groove boards applied horizontally. Painted.

Ceiling: 7/8" x 5" tongue-and-groove boards running north-south. Painted. Patch around chimney.

Baseboard: 1" quarter-round painted to match walls.

Cornice: 1" quarter-round molding painted to match walls.

Doors: Original window in the south wall has been replaced with a batten door. 34 7/8" W x 61 3/4" H x 7/8". Made from 7 boards with two battens. 2 cast-iron butt hinges 1" x 2½" secured with 3 screws. Painted.

Windows: 2, 12 3/4" x 12 3/4" casement type in south wall. 4" wide plain wood casing. 2, ½" x 1½" butt hinges on each window. Painted.

Lighting: 1, 2¼" diameter ceramic fixture in center of ceiling. Knob-and-tube wiring with bulb and pull chain.

Chimney: Hung chimney from dining room runs up through room on north side.

Upstairs North Bedroom

Floor: 7/8" x 5" tongue-and-groove running north-south. Unfinished. Covered with rag rugs.

Walls: 7/8" x 5" tongue-and-groove applied horizontally. Painted.

Ceiling: 7/8" x 5" tongue-and-groove running north-south. Painted.

Baseboard: 1" quarter- round molding on east, south, and west walls. 5 7/8" high plain board on north wall. Painted.

Cornice: 1" quarter-round on north and south walls. Painted.

Windows: 1, double hung sash with 6 over 6 lights in the north wall. 4" wide plain casing.

Lighting: 1, 2¼" diameter ceramic fixture in the center of the ceiling. Knob-and-tube wiring with bulb and pull chain.

Entry Hall

Floor: 1" x 6" boards running north-south. Unfinished. Covered with linoleum.

Walls: Random width (10" - 17") rough sash sawn vertical planks 1 3/4" thick. Covered with numerous layers of wallpaper.

Ceiling: 7/8" x 5" tongue-and-groove boards running north-south. Painted, with layers of wallpaper over the paint.

Baseboard: 9¼" high plain board. Painted.

Doors: 1, 32" x 79 3/4" in north wall. Two panels on bottom, etched light with hunting dog scene at top. 2, 1¼" x 3" decorative cast-iron butt hinges secured with three screws. 4 3/4" molded wood casing. Painted.
1, 31" x 76 3/4" in west wall. Mortise-and-tenon double panel with molding around panels. 4 5/8" molded wood casing. Casing is painted, door is varnished.

Stairs: Open stringer, double run with three winders. 32¼" wide landing at bottom. 9 3/4" run, 7" rise. Treads are 35¼" wide. 3 3/4" x 3 3/4" newel posts at top and bottom. Balusters are 1 3/4" x 1 3/4" with beading on east and west edges, one baluster per tread. Painted.

Parlor

Floor: 1" x 6" boards running north-south. Unfinished but covered with layers of rag rugs, newspapers, linoleum, newspapers, carpet. Patch on south side beleived to be where original hearth was.

Walls: North, east, and west wall are random width (10" - 17") vertical planks, 1 3/4" thick. South wall is stud wall covered with boards Salvaged from elsewhere in the house. Some appear to be from the ceiling in the entry hall, others appear to be risers from the original stairs. All walls covered with numerous layers of wallpaper.

Ceiling: 7/8" x 5" tongue-and-groove boards running north-south. Patch on south side believed to be where original staircase and chimney were located. Painted. Later covered with numerous layers of wallpaper.

Baseboard: 7 3/8" high plain board with 5/8" quarter-round molding as cap. Painted.

Doors: 1, double panel (see entry hall) in east wall. 4 3/4" molded trim. Painted on parlor side. Rimlock with porcelin knobs. filled areas indicate that hardware used to be mounted on the opposite side. No moldings around panels on the parlor side.

Windows: 2, in the north and west walls. Double hung sash with 1 over 1 lights. 4 3/4" molded wood trim. Painted. Hardware consists of small, stamped metal brackets for shades and curtains.

Lighting: 1, 2¼" diameter ceramic fixture in the center of the ceiling. Knob-and-tube wiring with bulb and pull chain.

Dining Room

Floor: 3/4" x 3¼" tongue-and-groove flooring running east-west. Laid over original floor. Linoleum carpet in center of floor with painted border around edges of floor. Small patch of false graining in front of doorway to bedroom.

Walls: East wall and one-half of west wall are random width (10" - 17") vertical planks covered with 7/8" x 5" tongue-and-groove boards applied horizontally.
South wall is stud wall covered with 7/8" x 5" tongue-and-groove boards applied horizontally.
North wall is stud wall made up of boards salvaged from elsewhere in the house. See parlor south wall.
All walls have layers of paint, covered with plain brown cartridg paper and more layers of paint.

Ceiling: 7/8" x 5" tongue-and-groove boards running north-south. Patch on north side of ceiling indicates where original staircase and fireplace were located. Ceiling has layers of paint, covered with plain brown cartridge paper and more paint.

Baseboard: 7 3/8" high plain board with 3/4" quarter round cap. Painted.

Cornice: 1" quarter round molding. Painted.

Doors: 1, 32" x 78" on east wall. 5½" molded wood casing. Casing is the same as that of the window in this room, except that 3/4" quarter round molding has been added to the outside edge of the casing. Door is presently missing. Casing is painted.
1, 30" x 77½" x 1¼" exterior door on the east wall. Wood, four panel, mortise-and-tenon. 4" wide plain wood casing. Rimlock with ceramic tortoise-shell knobs. Surface mounted deadbolt. 2, 1" x 4" butt hinges secured by four screws. Painted.
1, 33 7/8" x 77 5/8" x 1¼" on south wall. Wood, four panel, mortise-and-tenon with plain panels. Door has had 2" added to each side. Rimlock with porcelin knobs has been moved from original location. 2, 1" x 4" butt hinges secured by four screws. 4" wide plain wood casing. Painted.

Windows: 1, west wall. Same as in the parlor.

Lighting: Same as in the parlor.

Heating: Wood stove.

Chimney: Hung chimney on north wall. Built with bricks from the original fireplace and chimney. Outside dimensions are 12" x 16".

First Floor Bedroom

Floor: 1" x 6" boards in the closet area under the stairs, unfinished, no covering. 3/4" x 3¼" tongue-and-groove flooring in the bedroom. 8" wide varnished border around edge of floor, entire floor covered with linoleum at the present time.

Walls: Random width (10" - 17") rough sash sawn vertical planks. Covered with many layers of newspaper and wallpaper.

Ceilings: 7/8" x 5" tongue-and-groove running north-south. Painted.

Baseboard: 9¼" plain board with 3/4" quarter round shoe molding. Painted.

Cornice: 1" quarter round. Painted.

Doors: Same as east door of dining room but with 3 3/4" plain wood casing.

Windows: 1, east wall. Double hung with 6 over 6 sash. 4" plain wood casing. Painted.

Lighting: Same as dining room and parlor.

Kitchen

Floor: 3/4" x 3¼" tongue-and-groove flooring running east-west. Laid over original 1" x 6" flooring which runs north-south. Covered with many layers of linoleum.

Walls: Stud walls covered with 7/8" x 5" tongue-and-groove boards applied horizontally. 1" quarter round applied vertically in the corners. Painted.

Ceiling: 7/8" x 5" tongue-and-groove boards running north-south. Originally painted, now covered with canvas held in place by wood strips. Canvas has layers of paint also.

Baseboard: 7 3/4" high plain board with 1 7/8" high molded wood cap. Painted.

Cornice: 2½" wood cove molding. Painted.

Doors: 1, north wall, same as south door of dining room except that kitchen side of this door is false grained.
1, east wall, same as door on north wall. Exterior is painted, interior is false grained.
1, south wall, five horizontal raised panels. 34 x 80 x 1 3/8. False graining on kitchen side. 5½" wide plain wood casing. Painted.
1, west wall, 34½ x 81¼ x 1¼. Two raised panels. False graining on kitchen side, paint on exterior. 4" wide plain wood casing. Rimlock with porcelin knobs. 2, 1" x 3 3/8" butt hinges secured by three screws.

Windows: 1, south wall, east side. Double hung sash, 3 over 6 lights. 4" wide plain wood casing. Painted. Window has been cut down from 6 over 6.
1, south wall, west side. Double hung sash. 6 over 6 lights. 4" wide plain wood trim. Painted.
1, west wall. Double hung sash. 6 over 6 lights. 4" wide plain wood casing. Painted.

Lighting: Believed to have been the same as the other first floor rooms but fixture is missing.

Heating: Wood stove.

Chimney: Hung chimney on south wall. Outside dimensions are 12" x 16".

Bathroom

Floor: 3/4" x 3¼" tongue-and-groove floor running east-west. Laid on top of original floor.

Walls: Stud walls covered with 3/4" x 3¼" tongue-and-groove matched boards with V-edge and V in center. Painted.

Ceilings: Same as walls.

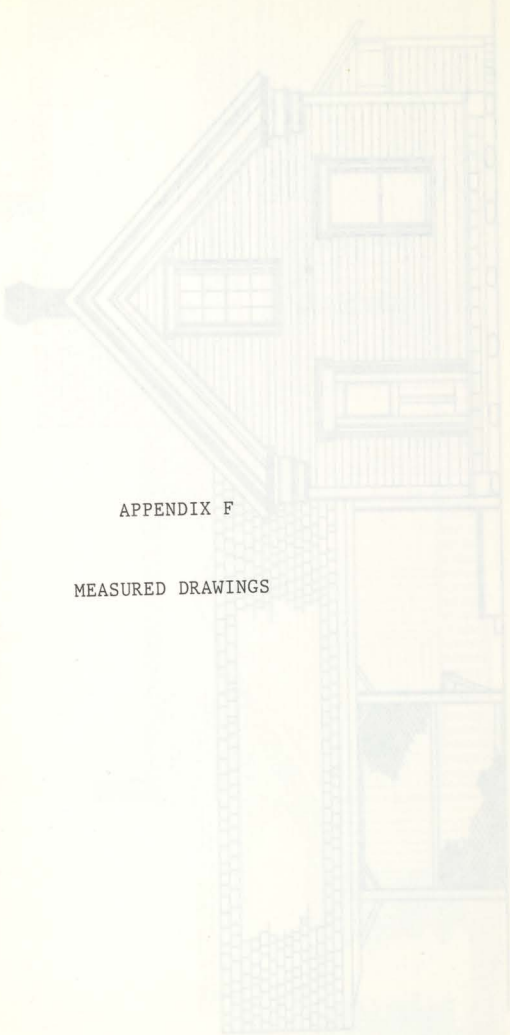
Doors: 1, same as south door of kitchen except that bathroom side is painted.

Windows: 1, south wall. Casement type, single light. 4" wide plain wood casing surrounded by 3/4" quarter round. Painted.
1, north wall. Casement type, single light. 4" wide plain wood casing.

APPENDIX E

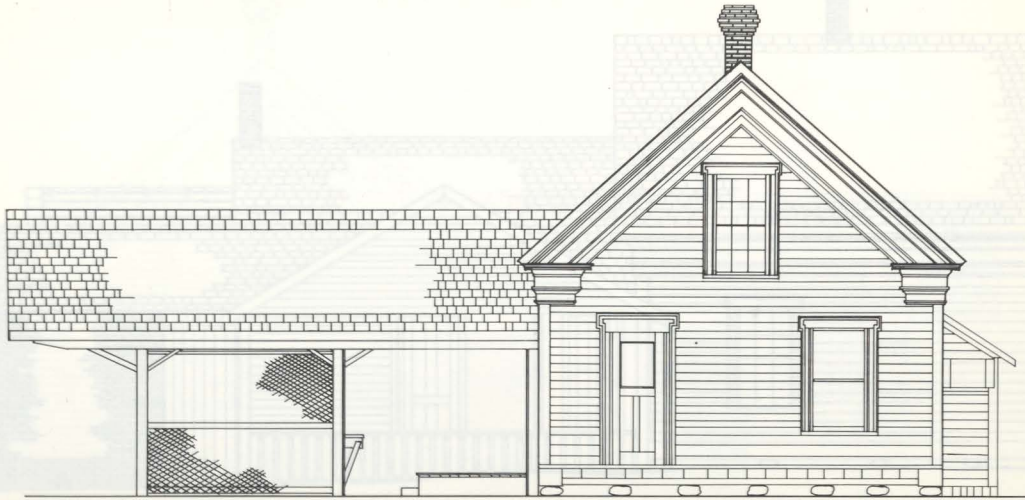
WOOD SPECIES USED IN THE COOLEY COTTAGE

Sample Location	Species
Window sill, north window of parlor.	Incense Cedar
Lower window molding, north window of parlor.	Incense Cedar
Window sash, west window south wall of kitchen.	Douglas Fir
Clapboard, west side of the kitchen.	Douglas fir
Parlor floor.	Douglas Fir
Weatherboard, west side of original house.	Douglas Fir
Patch in parlor floor.	Douglas Fir
Dining room floor, top layer.	Douglas Fir



APPENDIX F

MEASURED DRAWINGS

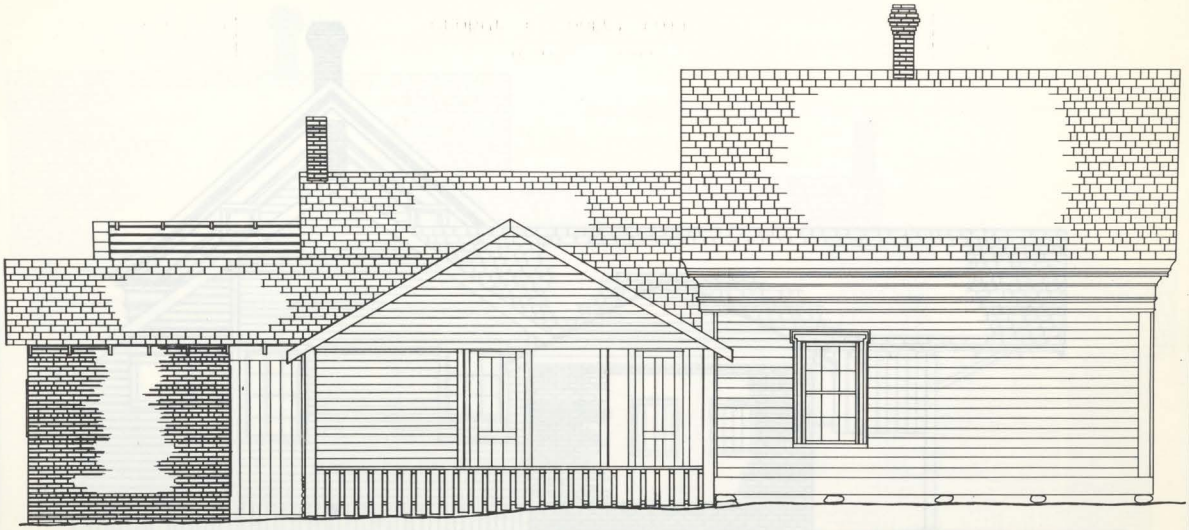


DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/8" = 1'

10' 5' 1'

TERMINAL PROJECT UNIVERSITY OF OREGON HISTORIC PRESERVATION PROGRAM	GEORGE C. COOLEY COTTAGE BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON	NORTH ELEVATION	SHEET 1 OF 8



DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/8" = 1'

10' 5' 1'

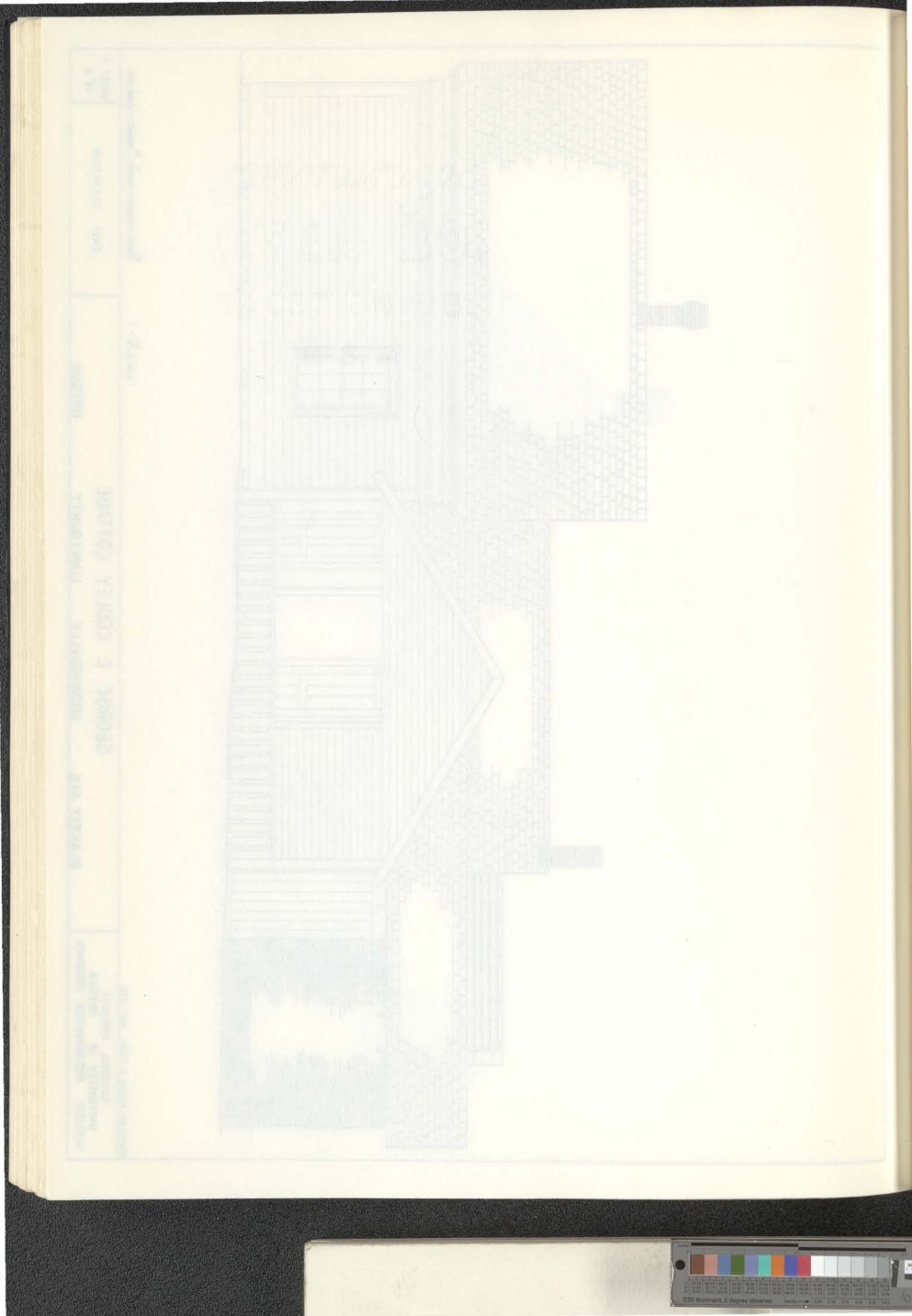
TERMINAL PROJECT
UNIVERSITY OF OREGON
HISTORIC PRESERVATION PROGRAM

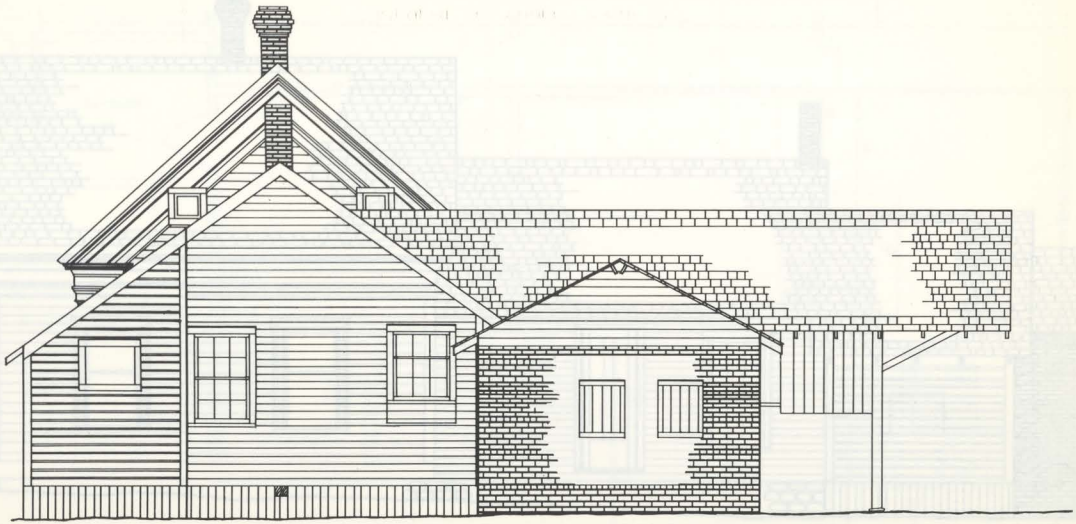
GEORGE C. COOLEY COTTAGE

BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON

EAST ELEVATION

SHEET 2 OF 8





DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/16" = 1'

10' 5' 1'

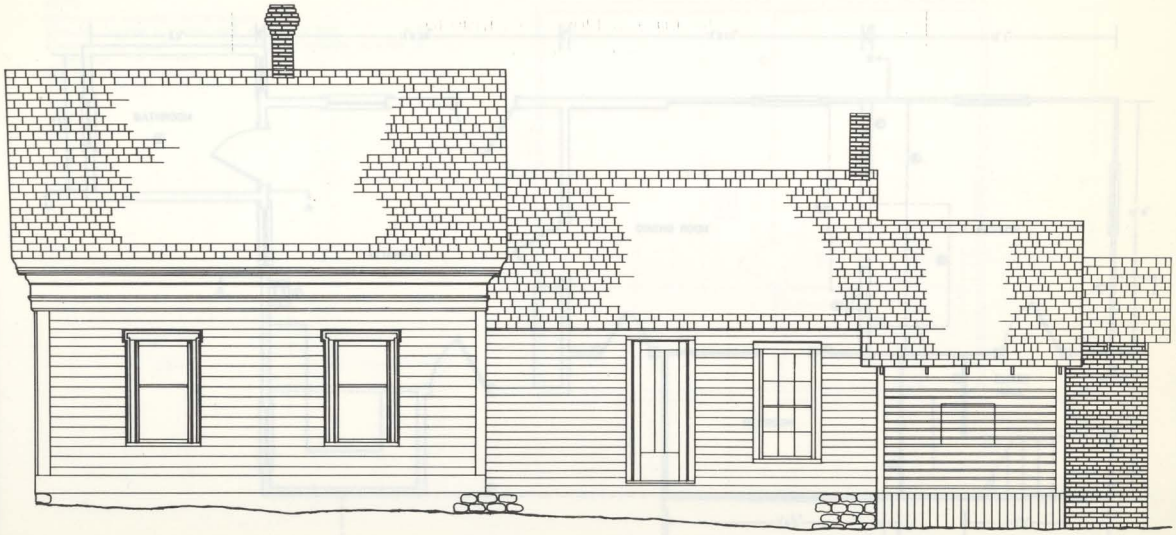
TERMINAL PROJECT
UNIVERSITY OF OREGON
HISTORIC PRESERVATION PROGRAM

GEORGE C. COOLEY COTTAGE

BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON

SOUTH ELEVATION

SHEET 3 OF 8



DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/8" = 1'

10' 5' 1'

TERMINAL PROJECT
UNIVERSITY OF OREGON
HISTORIC PRESERVATION PROGRAM

GEORGE C. COOLEY COTTAGE

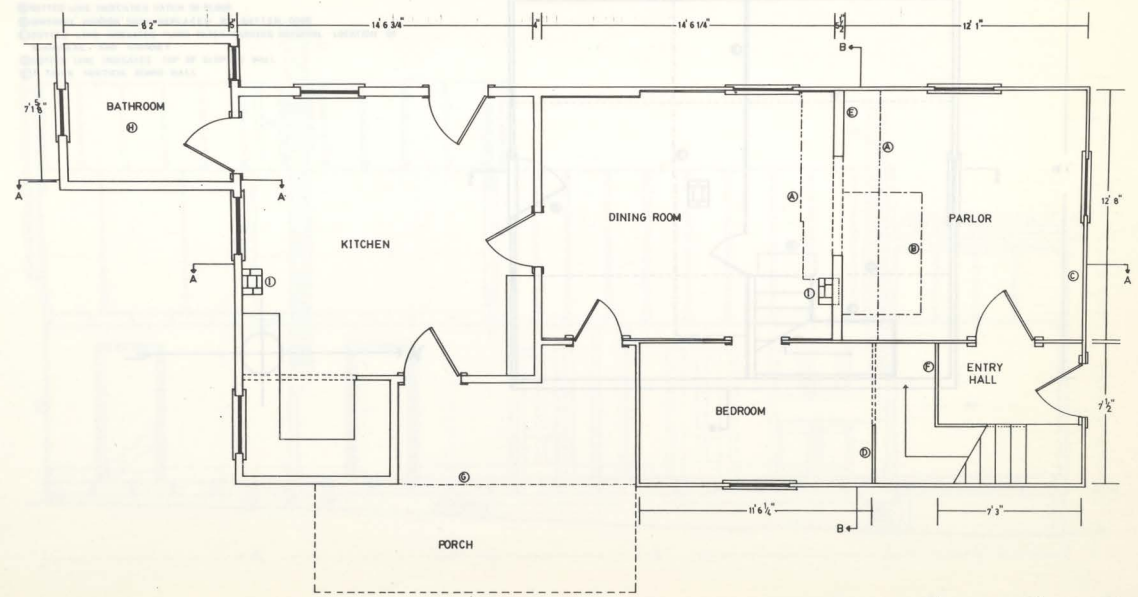
BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON

WEST ELEVATION

SHEET 4 OF 8

NOTES:

Ⓐ DOTTED LINE INDICATES PATCH IN CEILING; MOST LIKELY LOCATION OF ORIGINAL STAIRCASE AND CHIMNEY
Ⓑ DOTTED LINE INDICATES FLOOR PATCH; PROBABLY ORIGINAL HEARTH LOCATION
Ⓒ PATCHES IN NORTH WALL MARK ORIGINAL LOCATION OF FRONT DOOR AND WINDOWS
Ⓓ WALL MOVED APROXIMATELY 2' TO THE NORTH
Ⓔ WALL ADDED c.1904
Ⓕ ORIGINALLY PART OF NORTH WALL OF BEDROOM
Ⓖ DOTTED LINE MARKS END OF ORIGINAL PORCH; REMAINDER ADDED AT LATER DATE
Ⓗ BATHROOM ADDED c.1919
Ⓘ HUNG CHIMNEY



DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/8" = 1'

TERMINAL PROJECT
UNIVERSITY OF OREGON
HISTORIC PRESERVATION PROGRAM

GEORGE C. COOLEY COTTAGE

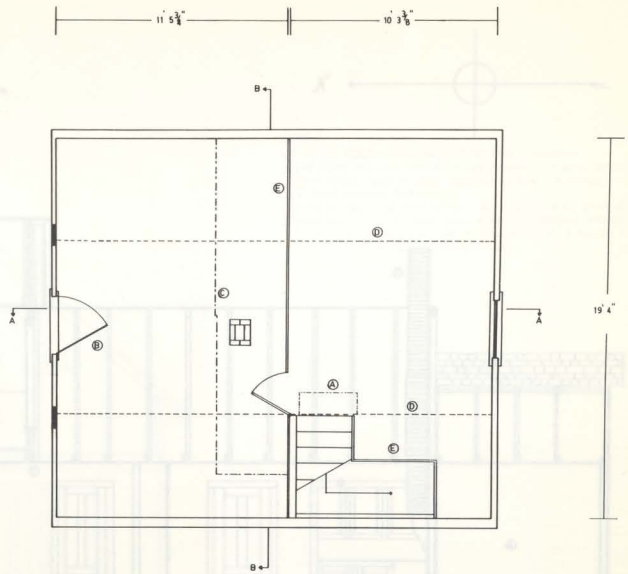
BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON

FIRST FLOOR PLAN

SHEET 5 OF 8

NOTES:

(A) DOTTED LINE INDICATES PATCH IN FLOOR
(B) ORIGINAL WINDOW SASH REPLACED BY BATTEN DOOR
(C) DOTTED LINE INDICATES FLOOR PATCH MARKING ORIGINAL LOCATION OF STAIRCASE AND CHIMNEY
(D) DOTTED LINE INDICATES TOP OF SLOPING WALL
(E) 1" THICK VERTICAL BOARD WALL



DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: 3/8" = 1'

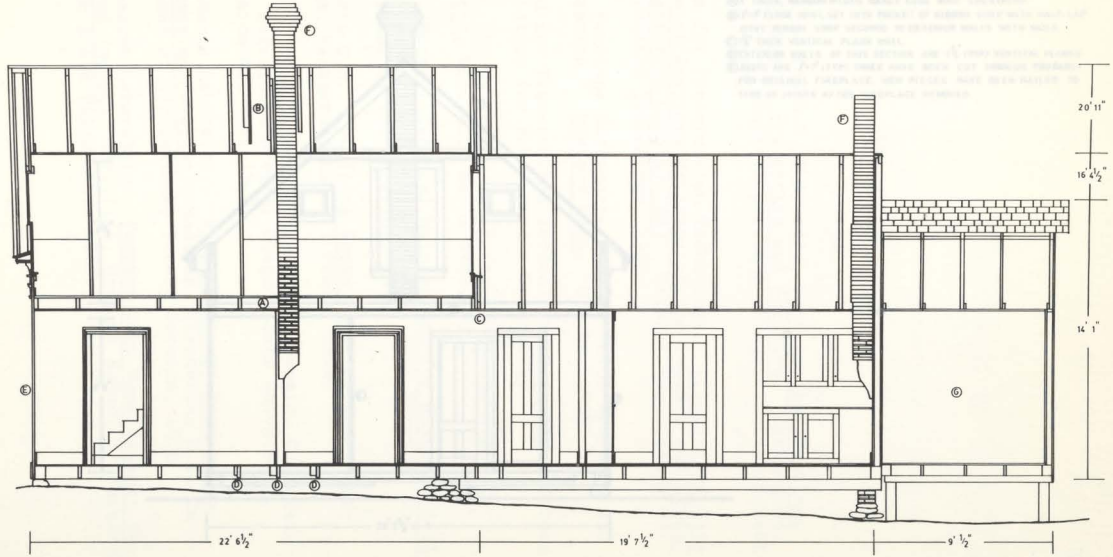
10' 5' 1'

TERMINAL PROJECT UNIVERSITY OF OREGON HISTORIC PRESERVATION PROGRAM	GEORGE C. COOLEY COTTAGE BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON	SECOND FLOOR PLAN	SHEET 6 OF 8

NOTES:

(A) JOIST FRAMING AROUND CHIMNEY IS CONJECTURAL.
(B) PATCH IN ROOF AND ALTERED RAFTERS INDICATE CHANGE IN CHIMNEY: PRESENT CHIMNEY IS SMALLER THAN THE ORIGINAL.
(C) ORIGINAL REAR PLANK WALL CUT OUT.
(D) CENTER OF JOIST CUT OUT, PROBABLY FOR ORIGINAL CHIMNEY: ADDED SUPPORT PIECES ARE NAILED TO SIDE OF JOISTS.
(E) 1¾" THICK, RANDOM WIDTH, VERTICAL PLANK WALL.
(F) CHIMNEY HEIGHT AND TOP DESIGN ARE CONJECTURAL.
(G) BATHROOM SECTION NOT TAKEN THROUGH SAME AREA AS REST OF SECTION. SEE FIRST FLOOR PLAN.

N



DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: ⅜" = 1'

10' 5' 1'

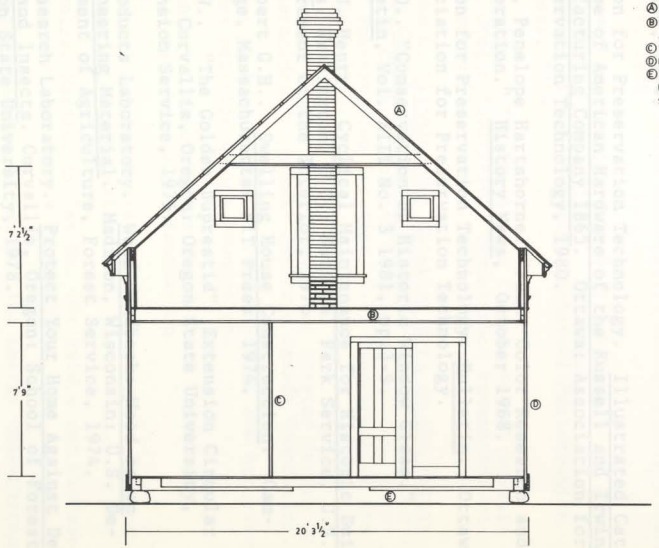
TERMINAL PROJECT
UNIVERSITY OF OREGON
HISTORIC PRESERVATION PROGRAM

GEORGE C. COOLEY COTTAGE

BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON

LONGITUDINAL SECTION
A-A

SHEET 7 OF 8



NOTES:

(A) 1" THICK, RANDOM WIDTH, WANEY EDGE ROOF SHEATHING.
(B) 2"x7" FLOOR JOIST, SET INTO POCKET OF RIBBON STRIP WITH HALF-LAP JOINT. RIBBON STRIP SECURED TO EXTERIOR WALLS WITH NAILS.
(C) 1⅜" THICK VERTICAL PLANK WALL.
(D) EXTERIOR WALLS OF THIS SECTION ARE 1⅜" (TYP.) VERTICAL PLANKS.
(E) JOISTS ARE 2"x7" (TYP.) THREE HAVE BEEN CUT THROUGH, PROBABLY FOR ORIGINAL FIREPLACE. NEW PIECES HAVE BEEN NAILED TO SIDE OF JOISTS AFTER FIREPLACE REMOVED.

DRAWN BY: FRANK A. FIORI MAY 1983

SCALE: ⅜" = 1'

10' 5' 1'

TERMINAL PROJECT UNIVERSITY OF OREGON HISTORIC PRESERVATION PROGRAM	GEORGE C. COOLEY COTTAGE BLAKELY AVE. BROWNSVILLE LINN COUNTY OREGON	TRANSVERSE SECTION B-B EAST - WEST	SHEET 8 OF 8

BIBLIOGRAPHY

Anderson, L.O. and G.E. Sherwood. Condensation Problems in Your House: Prevention and Solution. Washington, D.C.: United States Department of Agriculture, Forest Service, 1974.

Association for Preservation Technology. Illustrated Catalogue of American Hardware of the Russell and Irwin Manufacturing Company 1865. Ottawa: Association for Preservation Technology, 1980.

Batcheler, Penelope Hartshorne. "Paint Color Research and Restoration." History News, October 1968.

Association for Preservation Technology. Bulletin. Ottawa: Association for Preservation Technology.

Byrne, R.O.. "Conservation of Historic Window Glass." Bulletin, Vol. XIII No. 3 1981, pp.3-9.

Chambers,J. Henry. Cyclical Maintenance for Historic Buildings. Washington, D.C.: National Park Service, U.S. Department of the Interior, 1976.

Dietz, Albert G.H.. Dwelling House Construction. Cambridge, Massachusetts: MIT Press, 1974.

Every, R.W.. "The Golden Buprestid" Extension Circular 713. Corvallis, Oregon: Oregon State University, Extension Service, 1975.

Forest Products Laboratory. Wood Handbook: Wood as an Engineering Material. Madison, Wisconsin: U.S. Department of Agriculture, Forest Service, 1974.

Forest Research Laboratory. Protect Your Home Against Decay and Insects. Corvallis, Oregon: School of Forestry, Oregon State University, 1978.

Frangiamore, Catherine Lynn. Wallpapers in Historic Preservation. Washington, D.C.: U.S. Department of the Interior, National Park Service, 1977.

Goulding, R.L. and R.W. Every. "Dampwood Termite Control" Extension Circular 700. Corvallis, Oregon: Oregon State University, Extension Service, 1973.

Goulding, R.L. and Joseph Capizzi. "Carpenter Ant Control". Extension Circular 627. Corvallis, Oregon: Oregon State University, Extension Service, 1976.

Graham, Robert D.. Wood Pole Maintenance Manual. Corvallis, Oregon: Oregon State University, Forest Products Laboratory, 1979.

Grimmer, Anne E.. "Preservation Brief: 6 Dangers of Abrasive Cleaning to Buildings." Washington, D.C.: U.S. Department of the Interior, Technical Preservation Services, 1979.

Haskins, Leslie. "The Story of a Pioneer Store" Brownsvile, Oregon 1851-1938. Unpublished manuscript at the Brownsville, Oregon Public Library.

Hecker, John C. Planning for Exterior Work on the First Parish Church, Portland, Maine. Washington, D.C.: Historic Conservation and Recreation Service, Technical Preservation Services, U.S. Department of the Interior, 1979.

Heritage Canada Foundation. "Technical Dossier Series No. 8: Pesticides." Ottawa: Heritage Canada Foundation.

"Technical Dossier No. 2: Investigation and Recording." Ottawa: Heritage Canada Foundation.

"Technical Dossier Series No. 5: Roof Claddings." Ottawa: Heritage Canada Foundation.

"Technical Dossier Series No. 6: Masonry." Ottawa: Heritage Canada Foundation.

"Technical Dossier Series No. 10: Paints and Finishes." Ottawa: Heritage Canada Foundation.

"Technical Dossier Series No. 14: Energy Conservation." Ottawa: Heritage Canada Foundation.

"Technical Dossier Series No. 4: Wood Conservation." Ottawa: Heritage Canada Foundation.

Tips on Home Maintenance in Canada. Ottawa: Heritage Canada Foundation.

Mack, Robert C.. "Preservation Briefs:1 The Cleaning and Waterproof Coating of Masonry Buildings." Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1975.

Mack, Robert C. , de Teel Patterson Tiller, and James S. Askins. "Preservation Briefs: 2 Repointing Mortar Joints in Historic Brick Buildings." Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1976.

McKee, Harley J.. Introduction to Early American Masonry. Washington, D.C.: National Trust for Historic Preservation, 1973.

Recording Historic Buildings. Washington, D.C.: National Park Service, U.S. Department of the Interior, 1970.

Mendel, Mesick, Cohen. Fort Johnson, Amsterdam , New York A Historic Structure Report. Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation service, Office of Archeology and Historic Preservation, U.S. Department of the Interior, 1978.

Miller, Kevin H. compiler. Paint Color research and Restoration of Historic Paint. Ottawa: Association for Preservation Technology, 1977.

Moss, Roger. Century of Color: Exterior Decoration for American Buildings, 1820-1920. Watkins Glen, New York: American Life Foundation, 1981.

Myers, John H. "Preservation Briefs: 9 The Repair of Historic Wooden Windows." Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service,U.S. Department of the Interior.

"Preservation Briefs: 8 Aluminum and Vinyl Sidings on Historic Buildings." Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1979.

Nelson, Lee H.. "Nail Chronology as an Aid to Dating Old Buildings." History News, November 1968.

Olin, Harold B., John L. Schmidt, and Walter H. Lewis. Construction: Principles, Materials, and Methods. Chicago: The Institute of Financial Education, 1980.

Phillips, Morgan W.. The Morse-Libby Mansion Portland, Maine: A Report on Restoration Work. Washington, D.C.: Technical Preservation Services, Office of Archeology and Historic Preservation, National Park Service, U.S. Department of the Interior, 1977.

Ramstead, David. Eugene, Oregon. Interview, April 1983.

Ramstead, Ruth Bailey. Eugene,Oregon. Interviews. 1981 and 1982. Interviews conducted by Joni Nelson of Brownsville, Oregon.

Scheffer, T.C. and A.F. Verrall. Principles for Protecting Wood Buildings From Decay. Madison, Wisconsin: Forest Products Laboratory, Forest Service, U.S. Department of Agriculture, 1979.

Smith, Baird M.. "Preservation Briefs: 3 Conserving Energy in Historic Buildings." Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S.Department of the Interior, 1978.

Stumes, Paul. W.E.R. - System Manual: Structural Rehabilitation of Deteriorated Timber. Ottawa: Association for Preservation Technology, 1979.

Sweetser, Sarah M.. "Preservation Briefs: 4 Roofing for Historic Buildings." Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1979.

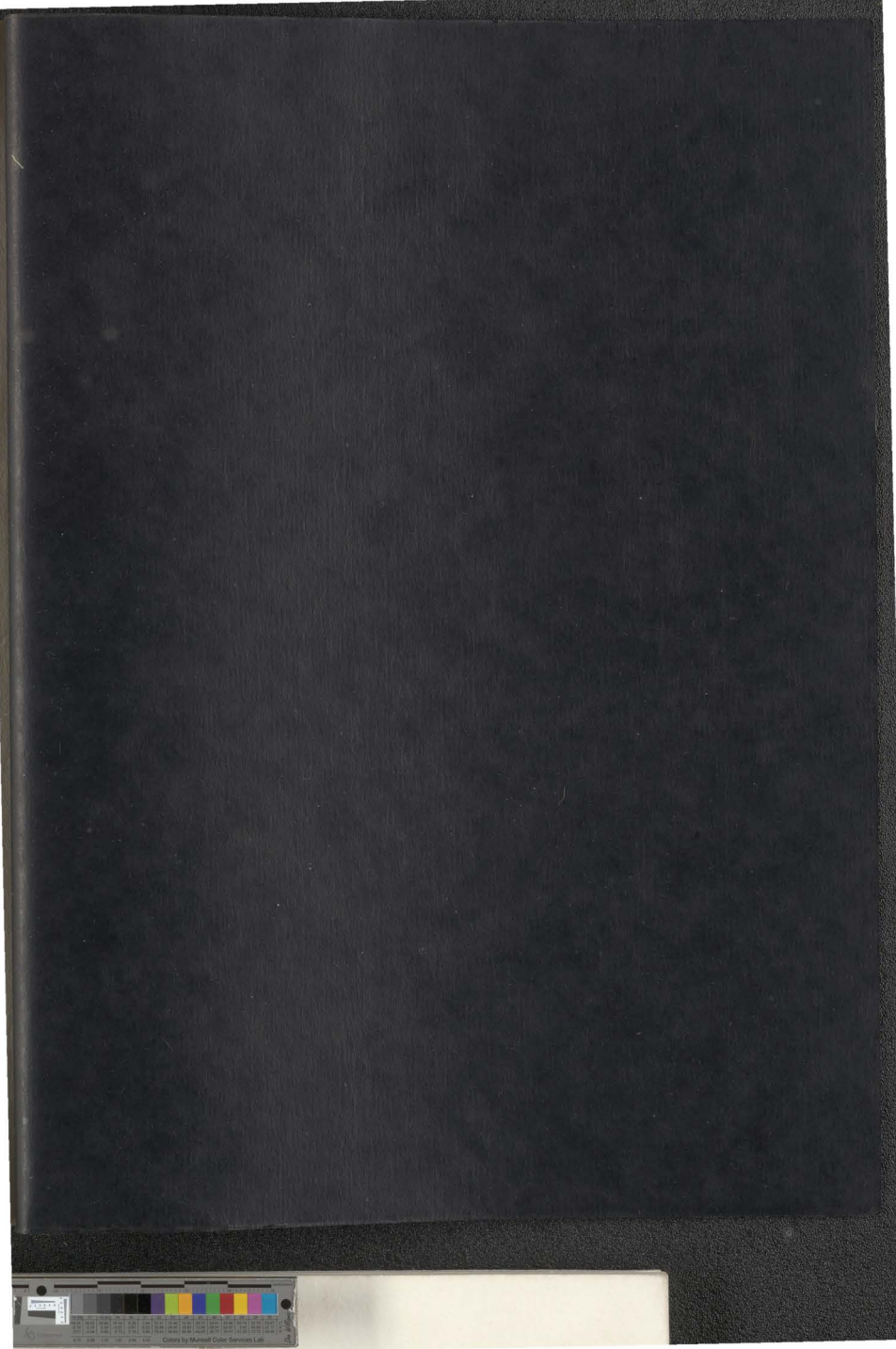
The Old House Journal. Patricia Poore editor, Brooklyn, New York.

Timmons, Sharon, editor. Preservation and Conservation: Principles and Practices. Washington, D.C.: Preservation Press, The National Trust for Historic Preservation, 1976.

U.S. Department of the Interior. The Secretary of th Interior's Standards for Historic Preservation Projects. Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1979.

Weeks, Kay D. and David W. Look. "Preservation Briefs: 10 Exterior Paint Problems on Historic Woodwork." Washington, D.C.: Technical Preservation Services, National Park Service, U.S. Department of the Interior, 1982.

White, Richard. Olmstead Park System, Jamaica Pond Boathouse, Jamaica Plain, Massachusetts: Planning for Preservation of the Boathouse Roof. Washington, D.C.: Technical Preservation Services, Historic Conservation and Recreation Service, U.S. Department of the Interior, 1979.




D50 Illuminant, 2 degree observer
Colors by Munsell Color Services Lab