

**LAWNFIELD
HISTORIC STRUCTURE REPORT SUPPLEMENT**

L JAMES A. GARFIELD NATIONAL HISTORIC SITE

**VAN DIJK, PACE, WESTLAKE + PARTNERS
MACDONALD AND MACK ARCHITECTS, LTD.**

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JAMES A. GARFIELD NATIONAL HISTORIC SITE**

Prepared by

Robert C. Mack
MacDonald and Mack Architects, Ltd.

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**VAN DIJK, PACE, WESTLAKE + PARTNERS
700 WEST SAINT CLAIR
CLEVELAND, OHIO 44113-1298**

**MACDONALD AND MACK ARCHITECTS, LTD.
712 GRAIN EXCHANGE BUILDING
MINNEAPOLIS, MINNESOTA 55415**

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INTRODUCTION

The James A. Garfield National Historic Site was authorized by Congress in December, 1980. Following this authorization, the National Park Service undertook several studies concerning the history of the site and the condition and evolution of the main house, also known as "Lawnfield." The Historic Structure Report for Lawnfield was prepared by Paul Newman of the NPS Denver Service Center and was published in November 1990. Unfortunately, time constraints prevented detailed study of two areas of interest: the first floor Kitchen and the second floor Bathroom. This report presents the findings regarding the original construction and alteration to these areas.

This HSR Supplement was prepared by Robert Mack of MacDonald and Mack Architects, Ltd., under subcontract with van Dijk, Pace, Westlake + Partners, the primary consultants to the National Park Service for restoration of the site. Documentary research and historical analyses were prepared by Charlene Roise of Hess, Roise and Company. Physical investigations were conducted on October 16-18 and 24-26 and on December 12-15, 1990; documentary research was conducted in October 1990.

Although the General Management Plan and the Interpretive Plan both indicate that the main house should be restored to the 1885/86 appearance, they do not provide specific guidance concerning restoration of the Kitchen or Bathroom. This HSR Supplement is intended to provide the information necessary for designers and interpretive specialists to incorporate these interesting areas into the overall plan for Lawnfield.

Little documentary information is available concerning either the Kitchen or the Bathroom. Conclusions concerning the original appearance and evolution of these areas are, therefore, based primarily on physical investigations. Neither area provides sufficient evidence to permit a highly accurate restoration of the space. The Bathroom and adjacent areas do, however, provide sufficient evidence to accurately deduce the evolution of the rooms and the placement of the plumbing fixtures. Several aspects of the kitchen layout also can be determined, but actual arrangement of the stove, ice box, and other non-fixed items is hypothetical.



HISTORY OF PHYSICAL CHANGES

DOCUMENTARY CHRONOLOGY

1877 James A. Garfield bought 40-acre tract from George W. Dickey.

April 14: "The barns have just been moved to the rear, the waterworks are nearly done, but the general state of chaos opens before us a fine field for work and contrivance. We commenced work, and put up a few beds on the second or roof story."¹

"When the Garfields arrived to take possession, on Saturday, April 14, 1877, they found the house in chaos. A new 'family room' was being added at the rear and 'water works' were being installed. . . . It was a typical Ohio farmhouse. . . . The roof story had an attic and two bedrooms. Miss Mays (Aunt Patty to the children), Mollie and Little Abe were to occupy the room next to the warm attic over the kitchen, and Harry, Jim, and Irv were to sleep in the east room."²

1878 "The first work Garfield did on the structure involved . . . installing new carpets, stove, and pipes. In 1878, the pipes bringing water to the kitchen were overhauled and two sinks were placed in the new pantry."³

1879 May 3: "Spent the forenoon in overhauling farm affairs . . . Some changes in the water works."⁴

July 10: "Gen. Garfield returned home on Saturday. . . . He has a pleasant family . . . They have already organized a cooking club, which meets around at the houses of the members once in two weeks. Every member is required to bring a dish of her own cooking and a bit of needlework, upon which they must sew an hour while some one reads to them; so our young girls are in a fair way to become highly accomplished."⁵

August 13: "On the way here, I have been reflecting on the subject of our new farm house, and am strongly inclined to the opinion that we had better mature all our plans this season and start the building early next spring and [?] completed next year while we are at Mentor -- and let the dear boys [?] our plans, and the work of construction while they are with us during the summer vacation. . . . From present appearances we can build cheaper next spring than at any later time for years to come. Think about the location you would prefer and I will write A. Bright to send the plans to Mentor."⁶

August 14: "I intend to take the time to examine some of the cottages here with a view of getting hints for our new house, which is becoming a growing reality with me."⁷

September 2: "I hope you will take notice of houses and their [?] plans, and bring me any suggestions that this trip may bring you."⁸

1879 September 4: "I have spent the night at the house of Gen. Shepherd, and have found several things about its construction which it will be well for us to remember, when we build. Their hall is very like the one you have planned -- 12 feet wide, and turns at a right angle before the stairs begin. . . . The house is heated by steam, and I think it is the best arrangement I have ever seen -- and gives a healthier and more equitable heat than the furnace. Please remind me of these points when we again resume our planning."⁹

September 22: "I want your opinion and judgement on a certain matter of domestic economy very much. I find that we have neither room nor pans sufficient to take care of all the milk. Moreover, I find the best butter makers are abandoning the old methods and adopting the use of coolers for gathering cream. Now if we are going to have an [?] dairy we must make butter; and we must make the best possible. now my query is will it not be cheaper in the end to begin this Fall on the new plan? Buy a set of coolers -- which I am told will cost in the neighborhood of twenty dollars -- and have the use this Fall."¹⁰

1880 House enlarged to two and one-half stories at a cost of approximately \$4,000.

February 8: "I hope to find time to get away to Ohio for a few days to look after some repairs to my house at Mentor."¹¹

February 26: "After breakfast we all went to our house and spent the afternoon in making a careful examination of the frame of it and devising the best means for raising the upper story and making repairs."¹²

February 27: "At half-past nine o'clock Mr. Judd came and we completed our plans for the repair of the house. He will have a draft made and sent to us for approval."¹³

March 4: "Gen. Garfield made a flying business trip to his home in Mentor last week . . . His visit to his farm was a necessity concerning the erection of some new buildings."¹⁴

March 16: "Today getting [?] lumber window frames and other lumber for the inside work."¹⁵

March 26 and April 2: Statement from "S. Wood & Sons, Contractors & Sewer Builders," Cleveland, for various pipes and fittings including "56 ps. 6 Pipe" and "8 - 3 Pipe."¹⁶ [See HP-97]

April 5: Freight bill from the Lake Shore & Michigan Southern Railway Company includes 56 pieces 6" pipe and 8 pieces 3" pipe.¹⁷

April 7: "I feel that there is the more need of care on your part as I see that the town of Mentor is agog with your new house."¹⁸

April 11: "Spent several hours in examining the progress of the work and making such changes as the situation required."¹⁹

April 12: "Train to Cleveland in company with the Doctor [presumably Robison]. Spent the afternoon in examining mantels and house fixtures. Purchased two stoves."²⁰

April 13: Bill from J. E. Hall, Cleveland, "Dealer in Parlor and Cooking Stoves of Every Variety, House warming and ventilating furnaces," for "1 S. H. Stewart stove \$17.00, 1 open front wood stove \$12.00, 1 S. H. tin warming closet."²¹ [See HP-97]

April 15: Freight bill from the Lake Shore & Michigan Southern Railway Company includes two stoves, one "tin closet," one "reservoir."²²

April 15: "Our trip was devoted to directing repairs on our house at Mentor."²³

April 15: "Gen. Garfield's house is building rapidly, and will be ready for plastering in about a week."²⁴

April 19: "Judd thinks he would have the Rooms all plain and square at the top. . . . We have started at the Old House -- terrible. Small [?] all caved in where there was plank in part and boards in [?] [?] stone wall. The [?] or the underpinning [?] are more rotten blocks. Sills much rotten. I shall do the best I can and repair it. Underpinning with stones. Raising where it is sunken."²⁵

April 20: "The west end is making I see some trouble. It is a scantling frame and the plates are not high enough for the raise. This will be overcome perhaps at the cost of the chamber floor in that portion."²⁶

April 30: "I have indulged [?] putting in French glass in the windows which will cost say \$15 extra over American."²⁷

May 3 [Washington, D.C.]: "Went shopping with Crete [LRG] to make some purchases for curtain stuff for windows at Mentor."²⁸

May 3: "The house is finished except what is to be done after the plastering which will be the chink [sic] coats and the brown one."²⁹

May 6: "The plastering chink [sic] coat and the brown are all on and a good job. . . . This morning they commence to put on the putty or white coat first in the Bonnite and through and along down as it is dry. . . . Window sash all finished."³⁰

May 7: "The measure from the floor to top of window casing first floor 9 feet 4 inches. Second floor 8 feet 6 inches."³¹

May 8, 15, 21: Statement from J. W. Penfield, Willoughby, includes purchases of 595 6-inch tile and 600 2-1/2-inch tile (May 8); 230 6-inch tile (May 15); and 650 2-1/2-inch tile (May 21).³²

May 19: "The inside painting has only the priming on. The woodwork is nearly finished down to the lower story."³³

1880

May 21: "The ram is not yet finished, but the [?] is at work on it now and the Doctor says he thinks they are getting a perfect piece of draining."³⁴

May 21: "We must think carefully on the question whether to put the family into a house so recently plastered and painted."³⁵

May 24: Freight bill from the Lake Shore & Michigan Southern Railway Company includes one sink.³⁶

May 27: "Total cost of repairs will reach \$4,000, perhaps a little more."³⁷

May 28: "At noon Crete and I went to Cleveland and spent four hours in making purchases, arranging for mantels, hearths, furniture, etc."³⁸

May 29: "You know that my heart is with you in your struggle to bring order out of our house of your planning."³⁹

May 30: "I barely managed to get the hall exactly measured and a diagram made out for Sterling before it was time to post it. . . . The carpenters are pretty well through. . . . Yesterday we put up beds in the attic and the girls staid there last night."⁴⁰

May 30: Freight bill from the Lake Shore & Michigan Southern Railway Company includes one bathtub and one "box marble."⁴¹

June 1: Bill from Myers, Uhl & Co., wholesale marble dealers, Cleveland, for "1 Ital. shelf 4.9 x 1.0 \$5.00"⁴²

June 1: "The plumbers are here today putting in bath-tub and sink."⁴³

June 4: "We -- I mean the painters and carpenters -- are putting the finishing touches on fast now."⁴⁴

September 13: Freight bill from the Lake Shore & Michigan Southern Railway Company includes "1 Bkyr.[Buckeye] Pump, a sec. gas pipe, 2 sewer elbows, 2 sewer traps, 2 sewer pipes."⁴⁵

September 17: Bill from J. W. Penfield dated 10/2/80 for "Cast man hole plate."⁴⁶

September 17: "John Gawn[e] of Cleveland came to build cistern for cesspool and lay pipes for the escape of roof water."⁴⁷

September 18: "At noon . . . John Gawne had finished his work."⁴⁸

November 17: "Drove to the stove store and bought some stoves."⁴⁹

December 8: "Pipe leading from my ram to the tank is frozen and the water supply cut off."⁵⁰

1880

December 19: "After dinner I went to Dr. Robison's and closed our long account of housebuilding."⁵¹

Bills and receipts from 1880 included in The James A. Garfield Papers provide a good deal of information about items probably used for the addition's construction, including lumber sizes and various types of finishes. [See HP-98 through HP-100] Among the things for which freight bills were received are many barrels of nails, much lumber (mostly pine), window frames, brackets, barrels of Louisville cement, a "Jack screw," balusters, a newel post and stair rail, doors, and boxes of glass.⁵²

"The cottage that stood upon the place when the General purchased it proved altogether too small and barren of conveniences. A Cleveland architect was employed for the metamorphosis. He decided that the walls could be raised and the building enlarged without pulling it down. It was then rebuilt from plans prepared by Mrs. Garfield, that is, in this way: A sketch was first drawn by the architect; this Mrs. Garfield filled out and then the general marked in various directions with a bold pen."⁵³

"The dimensions are sixty feet front by fifty deep. . . . The first floor contains a hall, with a large writing-table, a sitting-room, parlor, dining-room, kitchen, washroom and pantry. The last on the plan bears the generous endorsement 'plenty of shelves and drawers.'⁵⁴

"When they [Garfield's sons] returned in July, 1880, they scarcely recognized their home. A full second story had been built in, and a third story added."⁵⁵

"Generally, the first level is framed with 3-inch by 4-inch poplar studs, 14-15 inches on center, with 2-inch by 4-inch fir studs interspersed (see plates SP-5 and SP-6). Studs are lap spliced at the second level to 2-inch by 4-inch fir studs and notched around the 2-inch thick ledger board which supports the second-floor framing (see appendix G, Calculations, Fig. 1). The interior face sheathing is exterior shiplapped siding, placed horizontally in rooms 104 and 103, which probably was surplus material after the house was enclosed. The remainder of the interior sheathing is 1-inch by 10-inch or 1-inch by 12-inch on a 45 [-degree] angle. The interior plaster and lath is attached to 1-inch by 2-inch furring strips which run vertically at 1-foot centers (see appendix G, Calculations, Fig. 2)."⁵⁶

"Plaster is the preponderate wall and ceiling surface material used in the house. All of the plaster in both the 1880 portion of the house and the 1885 addition is on sawn lath."⁵⁷

"Nearly all of the wall and ceiling surfaces in the house that are not finished wood have wall coverings of paper, burlap, or canvas. This appears to be the case from the construction of the house in 1880 and continued on in the 1885 addition and thereafter. The interior finish analysis revealed that no paint was found underneath any of the papers, indicating that the walls were always sheathed with wall papers. . . . Unfortunately, it appears that all of the historic papers were stripped in 1936 when the rooms were repapered. . . . Some rooms were papered again in 1963, without stripping off the previous paper."⁵⁸

1880 "The original appearance of the 1880 and 1885 interior natural pine woodwork was a rich, dark, reddish, smooth, glossy finish. It was good enough to fool the journalists of the 1880s as one remarked that 'the rooms are finished in hardwoods.' It is still possible to see the original finish in some of the smaller recesses of the moulding where it was difficult to remove (ca. 1936-44 (?)). The best remaining example of this finish is in room 116 in the closet at the south west corner. It did not deteriorate or get stripped in this protected place, as it did at other locations."⁵⁹

Under "Missing Cabinetry:" "Room 214, Bathroom. Located on north wall; bureau with drawer for linen storage; design details for cabinet and room need more research."⁶⁰

"Interior doors are generally all wood, raised, four-panel, swinging doors arranged with the panels in vertical position, two tall ones on top and two shorter ones on the bottom. . . . In general the interior door hardware of the 1880 period follows this pattern. . . . All second-floor rooms . . . had plain three knuckle hinges. . . . All doors first and second floor had mortise locksets/latchsets. . . . All other doors beside front hall doors had white porcelain knobs."⁶¹

"Floors in the 1880 portion of the house are wood, most of which are finished with a varnish. . . . From the remaining evidence it seems likely that in 1880 all the floors were pine."⁶²

"The 1880 portion of the house is clad in shiplapped siding directly on the studs. There is no sheathing or other underlayment material on the exterior side of the studs. The top of the board has a convex taper creating a shadow when installed."⁶³

1881 September 19: James A. Garfield dies after being shot on July 2.

November 10: "Mrs. Garfield removed to Cleveland on Monday, where she will pass the winter, returning to Mentor in the spring. The arrangements for warming the Mentor residence are not fully completed, and Mrs. Garfield will be more comfortably situated in the city through the cold season. Mr. J. Rudolf [sic] and family will remain at the homestead as heretofore."⁶⁴

Floor plans for the first and second floors of Lawnfield published in the New York Herald on September 26, 1881, show a bathroom just west of the entry hall, directly north of Garfield's bedroom. The plans label the second floor bathroom as a bedroom. The plans are reproduced in Lawnfield HSR page 210, HP-12. The report notes that "there are many inaccuracies on these plans."

1885 Memorial Library addition constructed.

May 5: "Stanley-Brown speculated that if a windmill could be utilized to supplement the hydraulic ram in the lower field linked to an interior tank, water could be provided throughout the house even in the coldest winter months."⁶⁵

1885

May 16: "Work is not yet begun on the addition to the house. . . . A well is being dug in the old orchard and a wind-mill is to pump the water for us, the hydraulic ram being nearly always out of repair."⁶⁶

May 17 and 22: "As May, 1885, advanced, Stanley-Brown's interest in the Lawnfield project continue [sic] unabated. He offered many suggestions for state-of-the-art technological improvements including a gas engine to pump water to a tank in the attic, observing that 'you have gas and the water supply is remote.'⁶⁷ On the 22nd, Stanley-Brown recommended siting the washroom under the cellar stairs, thus 'abolishing the wash house,' . . . placing tiles on the kitchen floor . . . circulating hot air in pipes contained in a shaft covered with a removable board; and installing quality plumbing."⁶⁸

June 4: "Ground has been broken for the new fire proof library, which will stand between the office building and the late President Garfield's house."⁶⁹

July 16: "Mrs. James A. Garfield, including her entire family, have arrived at Lawnfield. Extensive additions are now being built on the northeast portion of the house, also expensive improvements are going on in its sanitary works."⁷⁰

September 10: "An abundant supply of gas has been found at the Garfield well ample for lighting and heating purposes. Drilling was discontinued several days since when the last vein was struck at a depth of something over 800 feet. A steam heater will be used for warming the rooms. J. Stanley Brown has been for several days a guest of the Garfields. It is said he may assist in the plan and arrangement of the library room which is to be in the addition now being made to the residence."⁷¹

October 8: "Mrs. James A. Garfield has offered her Cleveland residence for sale."⁷²

"The old kitchen has gone and the girls are delighted with the new one, especially the gas part of it."⁷³

"I have no positive recollection about where the gas pipe goes in from the well but it seems to me that it must enter the basement almost under the kitchen porch. That part of the house was built at the same time when the gas well was drilled. The only other place which occurs to me as possible would be near the entrance to the laundry. This would be the nearest point to where the old gas meter stood which supplied the pressure and in that case the pipe going below ground would appear through the floor somewhere in the neighborhood of the entrance to the laundry. . . . The water tank . . . sections are cast iron bolted together rather than riveted as a wrought iron tank would now be made."⁷⁴

"The Lucretia R. Garfield papers at the Library of Congress contain many receipts and financial records of the 1885-1886 library construction project. For example, the lathing and plastering of 'your Place at Mentor' cost \$171.93. Other bills include William Judd, 'Builder and Constructor,' working in the barn; 'Working with Plumber in B. Pantry' and / Fixing Back Room and Front Service for a total of \$59.42."⁷⁵

"A strong wind had blown the gas well derrick down in late August."⁷⁶

"When the time came for Hal and Irv to leave for St. Paul's School, the main structure of the addition was fairly complete -- the memorial library with its fireproof section, the new kitchen, laundry, and maids' rooms."⁷⁷

"In 1885, Lucretia commissioned the construction of a major wing to be added to the rear of Lawnfield to house, primarily, a memorial library dedicated to her husband. She retained Cleveland architect Forrest A. Coburn to design the addition. Coburn was senior partner in the firm of Coburn and Barnum (later, Coburn, Barnum, Benes and Hubbell), which designed the Blackstone Building, the Western Reserve Medical School Building, Guilford Cottage at Mather College and many Cleveland Public School buildings. The firm was one of Cleveland's most prominent and it was natural that Lucretia would utilize it."⁷⁸

"Brown [Joseph Stanley Brown, who had served JAG's personal secretary] suggested moving the kitchen to the new wing and eliminating entirely the 'narrow sluiceway' . . . The library, in Brown's plan, would remain on the ground floor . . . Coburn incorporated many of these ideas into his final plan but placed the library instead on the second floor . . . [placing] the kitchen on the first floor of a new, ancillary frame addition, attendant to the library wing."⁷⁹

"The first plans left the kitchen in the middle of the enlarged house. It was their mother who solved the dilemma. At the end of May she wrote to Hal, outlining in detail the solution she had finally reached, and the addition was built according to her plan."⁸⁰

"At the request of Mrs. Garfield, I undertook the task of putting into useable form the great mass of material accumulated by the General. . . . The material was deposited in a specially prepared fireproof room at the family home in Mentor, Ohio."⁸¹

"The 1885 addition was balloon framed with 2-inch by 4-inch fir studs spaced at 16-inch centers. Tongue-and-groove sheathing (1-inch by 4-inch) covered by tapered lap siding was used on the exterior of the walls. Sawn lath and plaster was directly applied to the studs on the interior. This was observed in the west wall of room 117 and the south wall of room 116. . . . The 1885 addition used surfaced lumber for most of the floor framing."⁸²

"Chimney 6 once had the 1885/86 kitchen stove(s) connected to it. The stoves were presumably still in operation as late as the late 1930s. The kitchen was still in its same location under the first curator, Mrs. Ivan Sutliff."⁸³

"A remnant of wainscoting remains in the closet at the southwest corner that may be original to this room. It has V-groove paneling in the wainscot. More research into this area needs to be accomplished in order to determine the original appearance. . . . It is suspected that there also was a tile wainscot in the kitchen, at least behind the sinks and maybe by the range. From peering behind the existing paneling on the upper part of the south wall where the sinks used to be, the ghost of a wainscot cap is evident at 4

- 1885 feet 2-1/2 inches above the floor, the same height as the wainscot in the butler pantry. The lower part of this wall has two layers of plaster. The second layer, possibly, was added to level the wall after tile was removed. More research is required to see if additional evidence of these wall surfaces can be determined."⁸⁴
- "Additional research in the kitchen is recommended to find the original wall configuration, finishes, and fixture locations. In order to accomplish this, a comprehensive investigation should be done, preceded by the removal of the wall-to-wall carpet, upper paneling on the wall, and the lowered wood ceiling."⁸⁵
- "Floors in the 1885 portion of the house are wood, tile[,] carpet, or concrete."⁸⁶
- "Interior doors in the new addition had decorative steeple hinges and mortise locksets/latchsets with black porcelain knobs."⁸⁷
- "A new well was drilled in the old orchard to upgrade the water delivery system. No precise evidence indicates exactly when the nearby well house was constructed but likely it was erected in 1885 because this 20- by 20-foot structure resembles the stone library annex. A windmill placed atop the well house pumped water then moved it to a 300 gallon tank on the upper floor of the main house. . . This system then replaced the frequently unreliable hydraulic ram Garfield had installed in 1877."⁸⁸
- "The water tank . . . sections are cast iron bolted together rather than riveted as a wrought iron tank would now be made."⁸⁹
- "This map denotes the period when the general construction of the wellhouse/windmill, possibly the gasworks . . . had been completed. A new water well was dug and the gas well completed. The location of these features are known because later maps illustrated precise location."⁹⁰
- 1888 This writer visited Lawnfield in 1886: "I annex a published description of that period, by a visitor who had a facile pen with which to write, and a bright day in which to observe: 'Although the house is far in the country it has all the conveniences of a city home, in plumbing, gas-fitting and steam-heating. A natural gas well has been bored on the farm and the yard is kept lighted day and night.'⁹¹
- 1892 December 14: "The flow of gas from the new well at Lawnfield is fair, but not sufficient to induce others to venture in further search for natural gas here at present."⁹²
- 1893 New Carriage House built.
- Old horse barn and other barns moved to back of property.
- 1900 "This ca. 1900 drawing clearly locates the main house, three smaller structures to the rear (campaign house, ice house and perhaps a privy), the 1893 carriage barn, the tenant's house across the rear lane, three hen houses, a large barn (now moved from the front of the property), and two smaller sheds."⁹³

1900 "A June 1900 landscape plan for Lawnfield and nearby Hollycroft was prepared by 'T. Wilkinson Elliot, Landscape Architect of Pittsburgh, PA.' . . . A well to the rear of the main house is connected to the windmill pumphouse by a six inch water line. A six inch sewer line and a one-and-a-half inch water line stretch back of the house beneath the lane to the rear of the property toward the north."⁹⁴

1904 Porches and entry altered. Interior alterations on second floor.

March 24: "Mrs. Garfield is having a new and modern porch or portico built on the front and east side of her home at Lawnfield."⁹⁵

"Additional window changes occurred ca. 1903/04. At that time, the 1880 window into the second-floor bathroom on the east side was replaced by a pair of single-hung windows with small lights bordering the sash (W:209). This change occurred in connection with interior partitions that were moved at this time."⁹⁶

"The second-floor window, centered under the gable on the east elevation, was altered. The change from a single window to two smaller ones with wooden panels between, indicates changes on the interior of the house. It is believed that this was done to alter the interior room sizes in this area. . . . It was determined from the paint analysis that this work was accomplished just prior to the 1904 repainting of the house.

"West elevation changes at this time may have included altering the rear gable third-floor window. This small horizontal window, located below the shingled gable end, was changed to a pair of double-hung windows extending up into the shingled gable. It is suspected that this change occurred at the same time as the alteration of the window on the east, but it is not known for sure. This work again involved the installation of a bathroom."⁹⁷

1918 Lucretia Garfield died.

1922 "The aging structure required periodic maintenance -- a balky steam furnace attracted Stanley-Brown's attention because his granddaughter planned to be married at Lawnfield in late March, 1922. Apparently the heating system was repaired."⁹⁸

1936 May 20: Garfield heirs donate the Main House and Campaign Office to the Western Reserve Historical Society.

"Mrs. Ivan Sutliff, a curator between 1936-1938, has related that there was no central heat or electricity in the 'Garfield residence' portion of Lawnfield."⁹⁹

"An unsigned (possibly by A. O. Beamer?), undated drawing found in the files that apparently dates from the late 1930s shows a large undivided multi-purpose room (now divided by partitions into rooms 116, 117, 118) serving as a kitchen and sitting room for the Sutliffs (see plate MD-1 in Lawnfield HSR). But room descriptions of where to place new radiators in a 1942 contract correlate to the present location of the wall

1936 between the present living quarters and the present kitchen. The contract document does indicate though, that the late 1930s kitchen was located in the historic kitchen (room 116) and the living room was in the space of present rooms 117 and 118 (which were not divided as they are now). This is consistent as far as where functions were located with the drawing in plate MD-1. Remaining fabric in these rooms, although altered, seems to indicate that the wall dividing rooms 116 and 117 was always there. It is believed that the drawing was a proposal that was never enacted. By 1941, the kitchen was moved to room 117, and room 116 became the living room. Later room 116 functioned as the library reading/research room for the LCHS into the 1980s, and then again as a living room for a curator."¹⁰⁰

"When the WRHS acquired the main house in 1936, it was extremely rundown, and required a great deal of immediate fix-up to prepare the house for visitation. . . . There was no real plan or priorities established for this initial phase of rehabilitation activity at Lawnfield. James R. Garfield . . . helped the crew with painting and papering. . . .

"By June 1936 Norton had collected over \$7,000 to do 'considerable replastering and repapering in the interior.' Visual inspection suggests that the plastering work included the entire ceiling of the front entry hall (room 102), the parlor (room 110), and the dining room (room 111)."¹⁰¹

August: "Refinished floors. Revarnished and repainted woodwork."¹⁰²

"Most of the current wallpaper was applied in 1936, with some reapplication in the 1950s and 1960s."¹⁰³

"Cosmetic repair work to open Lawnfield progressed rapidly during the summer of 1936 funded by \$10,000 donated by a group of Cleveland residents."¹⁰⁴

Assistant State Fire Warden and Ohio Inspection Board of National Board of Fire Insurance Underwriters evaluated the house for fire danger: "An undated (ca. late 1930s) combined report sketched twelve major recommendations including replacement of the electrical system; chimney closure or repair; replacing the inadequate lightning rod system; replacing the existing pipeless furnace; creating a proper location for a new heating plant; permanently closing all register and grille ventilator openings in wood lathe and plaster walls or closing combustible ventilating shafts; tracing all gas piping to supply lines entering the building and capping abandoned pipe ends."¹⁰⁵

1938 Inventory done by WRHS contains no reference to second-floor trunk room/bathroom.¹⁰⁶

1939 "In March 1939 curator Helen Norris received bids from two paper hangers for work in the hall and two small bathrooms upstairs as well as the bedrooms."¹⁰⁷

"In June 1939 the Committee applied to Mentor Village for water meter and service from the Mentor Village Waterworks System. Until this time Lawnfield had its own water delivery system . . ."¹⁰⁸

1939 "Local history enthusiasts and friends of Lawnfield sponsored the Garfield House Festival in August, 1939, to raise money for 'needed repairs' such as . . . essential painting."¹⁰⁹

1940 Ca. 1940s: section describing "Trunk Room" from guidebook to house: "This was originally a trunk or storage room and was later converted into a bathroom. The fixtures have been removed and this room is now used for display purposes."¹¹⁰ This pamphlet is undated. It is possible, however, that it was part of the product of a \$50 contract awarded in December, 1941, "for art work on signs and pamphlets."¹¹¹

"List of Recommendations for Improvements" prepared by A.O. Beamer, ca. 1940 lists as urgent: (under "Carpentry") "install false ceilings on 1st floor of Quarters" and "install dinette and kitchen cupboards and walls;" (under "Masonry") "Install fireplace in Dinette; (under "Electrical Work") "Replace and install light outlets in Quarters;" (under "Special Craftsmen") "Sand Home and quarter floors." Items listed as "needed" include: (under "Carpentry") "install storm windows in Quarters;" (under "Masonry") "point up Chimneys of Home;" (under "Electrical Work") "install fluorescent fixtures in living quarters;" (under "Special Craftsmen") "Linoleum for Living quarters."¹¹²

1941 January: "Estimate of Repairs and Improvements Needed at Garfield House" includes under heading "Living Quarters": install false ceiling or "double floor", \$130 total; enlarge living room (marked as a priority), \$100 material, \$50 labor; fireplace in dinette, \$100 total; replace linoleum, \$95 materials, \$12 labor.¹¹³

"The [Ohio] legislature voted \$10,000 for Garfield house improvements, and Governor John W. Bricker signed the bill in June, 1941. The funds were to be divided between the 1941 and 1942 biennium for repairs, painting, and landscaping the grounds as well as opening the campaign office to visitors..¹¹⁴

"Apparently the actual appropriation of state funds for the Garfield property occurred slowly. By October, 1941, Beamer reported that \$5,000 to be monitored by the State Archeological and Historical Society in Columbus was on its way to Lawnfield. The historical group let contracts in December 1941 which included . . . \$513 for repairing and making the heating system automatic . . . Subsequent contracts included \$2,500 for a Delco heating plant . . . painting \$141.50 . . . Other appropriations earmarked . . . \$300 for inside painting."¹¹⁵

"In December, 1941 Shaffer [a Mentor electrical contractor] extended a range line in the new kitchen (most likely room 117), wired the dining room fixture."¹¹⁶

1942 "On January 14, 1942, the Garfield House Committee authorized the Union Sand and Supply Corporation to install an oil fired automatic Delco warm air heating system in the front wing with registers in all rooms on the first two floors, and to enlarge the hot-water plant in the rear wing."¹¹⁷

1942 January: Contract between the Union Sand and Supply Company, Painesville, and A.O. Beamer: "Install in kitchen of living quarters, 2-15 section 5 tube x 32" High Tubular Radiators, and in living room 2-12 section 5 tube x 23" High Tubular Radiators. Radiators shall be placed under windows."¹¹⁸

"The Delaware Gazette reported wiring and heating plant improvements in March, 1942. In October, 1943, contracts for plastering, insulation repairs . . . were announced."¹¹⁹

1943 Proposal from GIMCO Rock Wool Insulation to A.O. Beamer to insulate three 2-story sidewalls of "present living quarters."¹²⁰ This was apparently never done. However, rock wool insulation was installed above third-floor ceilings and "a 6-inch fill over all second-floor exposed ceilings."¹²¹

"Recommendations for Expenditure of 1943-44 State Funds" list the following for the living quarters: "Install fireplace (labor & materials) ['Postpone' is written by hand after this entry] . . . Replace linoleum (material) . . . Refinish floors (labor & materials)."¹²²

In late August 1943 Beamer "contracted with carpenter/painter Mark Roberts to . . . repaint linoleum in living quarters . . . clean or repaint kitchen and stairwell in living quarters . . . connect water storage tank . . . fix ceiling (stairway and toilet)."¹²³

1944 Garfield heirs deed additional land to Western Reserve Historical Society; buildings include carriage house.

"Another undated work order (ca. 1944) listed the following needs: . . . install dinette and kitchen cupboards and walls. . . . install false ceilings in living quarters. . . . install storm windows in living quarters. . . . lay flooring (1,100 ft)."¹²⁴

July: "In July 1944 Shaffer billed the Garfield Home for \$255 for four floor plugs, . . . converting nine gas fixtures, replacement of two ceiling lights with gas fixtures, installation of four sidewall fixtures."¹²⁵

1945 "The 1945-46 expenditure of the 'Additions & Betterments' appropriations for major projects included . . . carriage barn (HS-03) roof repair . . . and painting walls in the living quarters."¹²⁶

1950 Guidebook describing "Trunk Room": "In later years when primitive ways of living were yielding to modern conveniences, the old trunk room off the end of the hall was transformed into a bathroom. When the Home was opened to the public this was dismantled."¹²⁷

- 1950 ca. 1950s: Guide describing "Funeral Room": "The small room next to Zeb's room was a trunk room in the original house. It was later made into a bathroom after Mr. Garfield put in his own water system. It is now used as a funeral room."¹²⁸
- "In the early 1950s, specific maintenance and improvement projects included overhaul of the heating units in both the main house and living quarters, as well as the living quarters redecoration for \$250."¹²⁹
- "Presently the record is unclear concerning the amount of physical change and maintenance at Lawnfield in the 1950s and 1960s. . . . Normal maintenance such as painting, carpentry, and yardwork occurred at the site. The extent of this activity has yet to be researched and documented."¹³⁰
- 1952 "During 1952-53 . . . a new septic tank [was installed for] \$450.00 and accompanying plumbing \$273 (apparently the house was still not connected to the city sewer)."¹³¹
- 1955 "In 1955, noteworthy expenditures . . . \$2,548 for painting, \$615 for unspecified house repairs . . . Record keeping declined dramatically in the late 1950s, evidenced by a lack of extant documents at both WRHS as well as the LCHS."¹³²
- 1958 Guidebook describing the "Flower Room": "The small room near the end of the hall that the Dickey family called the trunk room, the Garfields made into a modern bathroom with water supplied from the tank they enclosed on the third floor. This room is now used to display the funeral flowers that were used in 1881 at the funeral of President Garfield."¹³³
- 1962 Inventory done by WRHS contains no reference to second-floor trunk room/bathroom or kitchen/living room in living quarters.¹³⁴
- "In 1962, the LCHS started to replace old plumbing with copper pipes and new fixtures."¹³⁵
- 1965 July 24: "The museum was given the [Garfield drape] glass last fall by Keith Funston of New York City, but has not had a display case until recently, according to James Cooper, curator. . . . Not all of the items are in the second floor specially built display case."¹³⁶
- 1968-69 In 1968, architectural and consulting engineers drew plans for rewiring the first and second floors, but due to lack of funds this project languished until the fall of 1969. All inside lighting fixtures were refurbished, rewired and hung back in the original rooms by the spring of 1970. . . It appears, from comparison to historic photographs, that some light fixtures either were not placed back in historic locations or had been changed during earlier rewiring."¹³⁷
- 1975 Lake County Historical Society purchased 3.44-acre parcel including well house, tenant house, barn, granary, and other small outbuildings for \$70,000.

- 1980 December 28: Congress authorized establishment of the James A. Garfield National Historic Site.
- 1984 April: National Park Service acquired rear parcel including outbuildings from Lake County Historical Society for \$205,000.
- 1988 July: National Park Service acquired front parcel, including Lawnfield, the Campaign House, and the Carriage House from the Western Reserve Historical Society

HISTORICAL ANALYSIS

KITCHEN

Documentary Evidence

The Garfields, at least the female members of the family, were very much involved with the activities of the kitchen. In 1879, the Garfields organized a cooking club to which "every member is required to bring a dish of her own cooking." (See Chronology 7/10/1879) Lucretia Garfield expressed concerns about equipment for new butter-making methods in a letter to James September 22, 1879. During the 1880 remodeling, the Garfields bought "1 S. H. Stewart stove, 1 Open front wood stove, 1 S. H. Tin warming closet," and the latter -- and probably all -- were apparently intended for the kitchen. (See HP-97) A subsequent freight bill lists "2 stoves, 1 tin closet, 1 reservoir." The reservoir was probably a tank fastened to the back of a stove to supply hot water. This kitchen, as well as the previous kitchen, had running water.

Far less documentary information is available about the 1885 kitchen. Different sources give credit for the idea to move the kitchen to Lucretia, architect Forrest A. Coburn, and Joseph Stanley-Brown (once Garfield's personal secretary and later the husband of Garfield's daughter, Mollie). Stanley-Brown suggested "placing tiles on the kitchen floor" and "circulating hot air in pipes contained in a shaft covered with a removable board," among another items.¹³⁸ The Painesville Telegraph reported on September 10 that "a steam heater will be used for warming rooms," so not all of Stanley-Brown's ideas were used. The remodeling was mostly completed by the end of summer. Harry Garfield, one of the President's sons, reported that "the old kitchen has gone and the girls are delighted with the new one, especially the gas part of it."¹³⁹ Whether this reference to gas refers to lighting, the stove, or both cannot be determined. That is about the extent of contemporary documentation of the room. Information relating to the gas and water works is included in the Chronology.

The Lawnfield Historic Structure Report notes that original wainscoting is extant in the closet in the room's southwest corner, and cites other physical evidence of the kitchen's original appearance. The report also claims that the kitchen stove, or stoves, were connected to the chimney on the west end of the south wall, and that "the stoves were presumably still in operation as late as the late 1930s."¹⁴⁰

An inventory done by the Western Reserve Historical Society in 1938 makes no reference to the room. Recommendations for work on the "living quarters" in 1940 included sanding the floors and installation of a false ceiling, light outlets, florescent light fixtures, linoleum, "fireplace in Dinette" and "dinette kitchen cupboards and walls"; this plan was not implemented. Several of these items appeared again in a 1941 recommendation, and by the end of that year, a revised plan of work had been initiated. In December, an electrical line had been extended for a range, and radiators were installed in the living quarters the next month. It was apparently at this time that the kitchen was moved to the former pantry, and the original kitchen was converted to a living room. According to the Lawnfield Historic Structure Report, "by 1941, the kitchen was moved to room 117, and room 116 [the original kitchen] became the living room. Later room 116 functioned as the library reading/research room for the LCHS into the 1980s, and then again as a living room for a curator."¹⁴¹ (Page 21-22)

The area was occasionally painted and received other repairs, as documented in the Chronology. Three major projects are noteworthy. Beginning in 1962, the Lake County Historical Society began to replace the old plumbing with copper pipes. The building was rewired in 1969. Finally, in 1987, bricks from the kitchen chimney were removed down to roof level due to concern over the chimney's stability. Salvaged brick was apparently used to rebuild all the house's chimneys the following year.

Physical Evidence

Physical investigations reveal a bit more about the evolution of the kitchen area. It is clear that the main Kitchen area, Room 116, originally was separated from the Hallway, Room 115, only by a north-south cased beam at the ceiling and not by the current wall. In addition, the Pantry, Room 117, originally was narrower and opened into the Kitchen rather than the Entryway, Room 118. (See BC-5) Evidence for this configuration is as follows:

- a. The partition separating Room 115 from Room 116 is constructed from modern lumber and is covered with modern paneling. Below the paneling, the beam is cased with finished millwork. The wall surfaces abutting the ends of the partition have earlier finishes.
- b. Nail holes from cut nails define the location of a former plate for the partition between Room 117 and Room 118. (See CP-7) The plaster of the walls and ceiling is patched at this same location, as is the base board. The nail holes are continuous, indicating that there was not an opening in the wall.
- c. There is a framed opening at the west end of the wall separating Room 116 and Room 117. The wood and nails indicate that the opening is original to the construction of the kitchen. Patched woodwork and plaster further indicate that the opening is original.

Additional physical evidence provides information about the original layout of the rooms. The kitchen had a sink near the center of the south wall, as evidenced by holes in the floor and remnants of piping. The sink had three supply pipes, probably hot water, cold water, and cistern water. Tile setting beds show the extent of ceramic tile flooring and wainscot in the area near the sink; ghosts of the ceramic tile on the wainscot match the backs of ceramic tiles found in the basement. (See CP-3)

The location of the stove is uncertain, but it probably ran in an east/west direction adjacent to the chimney. This hypothesis is based on the flue-hole in the chimney, the different wainscoting on the chimney, piping holes in the floor that probably were for a water heater, and a ventilator in the recessed area to the west of the chimney. Fuel for the stove also is uncertain; limited research into gas stoves seems to indicate that gas was not used for cooking until approximately 1895, so it probably used coal for fuel.

A servant-call box was located in the center of the north wall; the ghost for this call box matches the box that presently is located in the Hallway, Room 112. (See CP-5 and CP-6) Lighting was provided by a ceiling fixture located approximately in the center of the room; no evidence remains concerning the appearance of this fixture.

If the hypothetical placement of the stove is correct, it would appear that the ice box would have been centered on the west wall or placed in the pantry. A work table would have been placed along the north wall below the call box.

Little is known about the ventilation system. Remaining evidence includes only a framed opening with pieces of an operable grille. It is likely that the grille opened to a shaft leading to the third-floor exhaust room; the ventilation shaft from the Bathroom, Room 113, probably led to this same space. There is no evidence for any type of blower or other mechanical equipment, so the system probably operated strictly from stack action.

The Pantry, Room 117, layout is not clear, but there probably were shelves along the now-removed east wall. The cabinet currently located in the northeast corner of the room originally was located in the southwest corner, adjacent to the window, as evidenced by ghosts on the plaster, variations in the window trim to fit the cabinet, and variations on the cabinet to fit the window trim. (See CP-14 and CP-15.)

The layout of the west side of the Entryway, Room 118, also is unknown, although the width of the area to the east of the doors suggests there may have been some provision for storage.

BATHROOM

Documentary Evidence

It is likely that the house had running water by the time of the Garfields' occupancy. Garfield refers to "waterworks" in his diary on April 14, 1877, and the Historic Structure Report mentions (without citation) that kitchen water pipes were overhauled in 1878. The Garfields were presumably accustomed to indoor plumbing from their fourteen-year stay in Washington, D.C., just prior to moving to Mentor. Since little is known of the plan of the house prior to 1880, it is not known if the house had a bathroom at this time.

In the last half of 1879, Garfield's letters to his wife, Lucretia, frequently discussed their planned new house and his ideas for it garnered from places he visited -- New York City, Maine, Long Beach, New Jersey. He apparently involved an architect in the planning, for he wrote to Lucretia on August 13, 1879: "I will write A. Bright to send the plans to Mentor." (Unfortunately, there are no references to "A. Bright" in the Avery Architectural Index or several other standard reference works.) Ultimately, however, Garfield and Lucretia -- especially the latter -- seem to have taken over the design process. By February 1880, the "new house" became, instead, a major remodeling of the original farmhouse.

Construction began in Spring 1880. A local contractor, William Judd, was responsible for the work. In Garfield's absence, Judd was overseen by Lucretia and by Dr. Robison, a family friend. Correspondence between Mentor and Garfield provides many useful details of construction, although a number of Robison's letters, probably never very easy to decipher given his sloppy handwriting, have become almost illegible as a result of bleeding ink and moisture damage.

On June 1, 1880, Lucretia wrote that the plumbers were installing the bathtub and sink, probably at the northwest corner of the first floor. (See HP-12) In preparation, the Garfields had purchased pipes and fittings on March 26 and April 2, most of which were delivered on April 5. (See HP-96) A "reservoir" arrived in Mentor April 15 and, although this might have had something to do with the bathroom, it was more likely a box attached behind a kitchen stove to keep a supply of warm water. On May 8, 15, and 21 the Garfields purchased a total of 825 6-inch tiles and 600 2-1/2-inch tiles, perhaps destined for the bathroom. A freight bill dated May 24 documents the arrival of a sink, followed by a bathtub and a box of marble on May 30. The Garfields received a bill for \$5.00 dated June 1 from a wholesale marble dealer in Cleveland for "1 Ital. shelf 4.9 x 1.0." The box of marble and/or the shelf may have been for the bathroom or could have been intended for a fireplace mantel and surround. At any rate, the marble and the bathtub were probably the fruit of a shopping trip Garfield and his wife took to Cleveland on May 28 where they "spent four hours in making purchases, arranging for mantels, hearths, furniture, etc.," according to his diary entry.

Unfortunately, there is no known evidence regarding this first-floor bathroom's appearance. Receipts from the period in Garfield's papers and correspondence describe items bought and give general information on the remodeling, providing some clues (See HP-98 through HP-100).

In his diary on September 17, 1880, Garfield noted that "John Gawn[e] of Cleveland came to build cistern for cesspool and lay pipes for the escape of roof water." He does not explain whether the cesspool was for rainwater or for waste disposal.

Garfield installed a hydraulic ram to provide water pressure. By most accounts, however, the system was very unreliable. For example, on December 8, 1880, President-elect Garfield complained to his diary: "Pipe leading from my ram to the tank is frozen and the water supply cut off."

It thus appears that plumbing installed in conjunction with the 1880 remodeling was limited to the first floor, with a bathroom in the northwest corner and, probably, the kitchen. This configuration is corroborated by an 1881 floor plan published by the New York Herald; this plan labeled the first-floor bathroom, as described, and called the location of the second-floor bathroom a bedroom. (See HP-12) Since the plan had other inaccuracies, however, its validity on this issue is questionable.

By the time of the 1885 addition, it was clear that improvement to the plumbing systems was necessary. A windmill was built northeast of the house to pump water from a well. According to a 1900 map, the well was connected to the windmill by a 2-inch water line. (Current research indicates that the well probably was below the pumphouse. It also indicates that the line identified as a 6" sewer actually is 9" and extends from the house along the lane to the north.) (The Garfields purchased 6-inch pipe in 1880 -- See HP-96.) A 300-gallon tank was installed on the third floor to provide storage capacity for the house's water supply. Interestingly, Bicknell's Village Builder, a popular architectural design book published in the 1870s, called for a 300-gallon tank in specifications for one of its house designs. (See HP-106) These specifications also provide information on standard plumbing details of the era. (See HP-101 through HP-106) Although there is no direct documentary evidence, it is likely that the second floor bathroom was installed at this time.

Apparently, the plumbing renovation was a success. A visitor in 1886 wrote that the house had "all the conveniences of a city home, in plumbing, gas-fitting and steam-heating."¹⁴²

Another major alteration occurred about 1903, when the bedroom to the south was expanded and the bathroom commensurately reduced in size. The window pattern was changed to accommodate the new wall location. As shown in historic photos, this work was done prior to the porch reconstruction, which is documented as March 1904. (See HP-20 through HP-22) No written or photographic evidence has been found to show what impact this had on the interior configuration of the bathroom.

An inventory taken by the Western Reserve Historical Society in 1938 makes no reference to the room. The curator received bids for wallpapering "two small bathrooms upstairs" in 1939, several years after the house was opened for tours, so it is conceivable that the bathroom was still functioning as such until the 1940s. At any rate, by the time of Orville Beamer's curatorship in the 1940s, the bathroom fixtures were removed and the room was used for museum displays. It appears that the reference to this space as a "Trunk Room" developed at this time.

By the early 1950s, the room was called the "Funeral Room" in a typed house guide, without further explanation. A 1958 guide noted that the room "is now used to display the funeral flowers that were used in 1881 at the funeral of President Garfield."

Photographs of Garfield's funeral flowers (see HP-92 through HP-95) perhaps provide a small clue to the room's appearance. Assuming that the photographs were actually taken inside the bathroom, and assuming that some sections of the 1880 cabinetry remained on the room's north and east walls, the glimpses of cabinets and hardware in these photographs are rare documentation of the room's interior. While these assumptions are certainly subject to debate, they can at least provide food for thought given the virtual nonexistence of documentary evidence regarding the room's interior.

The only additional information specifically on the bathroom dates from 1965, when a specially-designed case was built into the north wall to house a collection of drapery glass donated to the museum the previous fall.

Physical Evidence

The original use of Room 214 is open to speculation. An 1881 floor plan describes the room as a "Bedroom," while later descriptions refer to it as a "Trunk Room." The origin of this later term is uncertain, but it may result from the presence of a transom at the doorway, which would have made the room different from the bedrooms, implying a different use. As will be discussed below, it also is possible that it was, indeed, a storage room.

Based on the following observations, it is clear, however, that the area became a bathroom between 1881 and 1903, probably in conjunction with the 1885 remodeling:

- a. The pipe chase in Room 108 encloses a finished area, including 1880 wall paper and wood trim, proving that it was installed after the 1880 work. (See CP-10)
- b. The paint layers on the wood pipe chase match the layers on trim known to date from 1880. If the 1885 paint was matched to the 1880 paint, the layering would be the same. This layering also indicates that the work was completed before the 1903 remodeling, when the paint scheme was changed.

- c. A piece of painted picture rail was removed for installation of the chase and was used as a wedge to hold the pipes in place.
- d. The flooring of Room 214 has been cut open and patched for installation of pipes. If the pipes had been installed at the time of construction, there would have been no need to open the flooring. (See CP-11 and CP-12)
- e. Plasterwork at the area of the sink and the plumbing vent has been patched, indicating that the work was completed after installation of the plaster. (See CP-13)

It also appears, however, that this originally had some use other than as a bedroom. This conclusion is based on the following observations:

- a. Modern random-width tongue-and-groove (T&G) flooring was removed as part of the investigations. The lower flooring consists of pine T&G boards with only one set of nail holes from the modern flooring. Since this room did not have finished flooring while the 1880 bedrooms did have finished floors, the room must have served some other purpose.
- b. There are a series of square nail holes running east-west approximately three feet to the south of the north wall. This would indicate the presence of a plate for some type of framing, perhaps for storage shelving or boxed-in plumbing fixtures.
- c. There is a transom over the doorway. Although the main reason for the transom probably was to provide natural light to the main corridor which otherwise would have been devoid of natural light, it also may indicate that the room served as something other than a bedroom or that the frame and trim were relocated from a different doorway. Selected trim was removed to investigate headers, and so forth. Based on this inspection it appears that the doorway is in its original configuration.

There are remnants of underlayment for linoleum on areas of the floor, indicating that the floor probably was covered with linoleum when it served as a bathroom.

In about 1903 the south wall of the bathroom was moved approximately three feet to the north, enlarging the southeast bedroom while reducing the size of the bathroom. Changes in the windows, as illustrated by historic photos, and plaster patches on the walls and ceiling in the area of the original partition are the primary evidence for this work.

Several of the floor boards were removed prior to or in conjunction with the 1903 remodeling to permit installation or alteration to the gas piping; these boards then were screwed back into place. A second linoleum floor must have been installed to provide a finished bathroom floor, but there is no direct evidence for this hypothesis.

1880 PLAN AND EXTERIOR APPEARANCE

The appearance of the east and north sides of the Main House following the 1880 remodeling is the subject of some question, primarily due to uncertainties regarding the floor plans. Floor plans prepared in 1881 show the east side containing a large dining room on the first floor and an equally large sewing room on the second floor. Both these rooms project further to the north than other portions of the structure. This configuration is, however, inconsistent with the existing roof forms.

Close examination of an 1880 photo (see HP-7) shows the eastern portion of the north wall as having a hipped roof with a dormer. It is clear, therefore, that the Sewing Room must have been substantially smaller than it is currently.

When projected to the first floor, however, this configuration would create a dining room which would have only one window on the east wall and which could accommodate only a small dining table. Such a configuration is both impractical from a users standpoint and inconsistent with photos and sketches from the period. (See HP-5, HP-12, and HP-59)

This inconsistency in room sizes on the two floors can be explained by assuming that the northern portion of the Dining Room was a single-story area with a flat roof. The Garfields clearly used such a treatment for the wood storage area on the west side. (See HP-7) An etching of the exterior done in 1881 shows just such a configuration on the east side. (See HP-91) Although there are numerous errors in the details of this sketch, the massing is generally accurate. Paint research, which shows that the north window in the Sewing Room dates from 1885 while the south window and finishes throughout the Dining Room date from 1880, further enhances this hypothesis. It is this author's opinion, therefore, that this configuration was, indeed, used.

The 1885 alterations affected both rooms. The north wall of the Dining Room was replaced with a masonry wall containing a door to a pantry. The Sewing Room was extended to cover the full length of the Dining Room and was converted to a bedroom. Additional changes in the Sewing Room included revisions to the closet and the installation of a fireplace on the north wall. Plaster patches are evident on the walls and ceiling of the closet, indicating that the wall originally was further to the south. Although finishes on the fireplace match those dating from 1880, it is this author's opinion that the fireplace dates from 1885, with the finishes made to match earlier work; this matching of finishes from 1880 and 1885 is similar to the situation found at the pipe chase in Room 108.

See Drawing BC-5 for further explanation of this evolution.

ROOM DESCRIPTIONS

The following room descriptions follow the format established in the Lawnfield Historic Structure Report. Trim designations and similar notations are also from that report.

Room 116, Kitchen

Floor

1" x 3 1/4" tongue-and-groove pine boards except at southeast corner, which has mortar infill over area of former ceramic tile (3'-2 1/2" north/south; 9'-8" east/west). Patched area from west edge of tile area to west side of chimney extending from south wall to 3'-8" north of chimney.

Walls

Painted plaster on wood lath.

Plaster infilled over ceramic tile setting bed at eastern portion of south wall; ghosts of former tile backs visible, match with buff-colored tiles from basement.

Plaster adjacent to south window has been removed revealing deteriorated studs.

Ceiling

Painted plaster on wood lath. Battens (3 1/2" wide x 7/8" deep 2 16" centers) over plaster. Paint on plaster below battens indicates that battens were applied some time after original construction.

Moldings and Wainscot

Natural finish type B5 pine base and type R4 wainscot cap.

3 1/2" "V" groove vertical board wainscot around chimney and in "closet" area in southwest corner. Baseboard on bottom and wainscot cap on top. Overall height approximately 4' - 6" on chimney and 6' - 6" in "closet."

Paneled wainscot on west and north walls. 8" wide panels with 3 1/2" stiles with base board on bottom and wainscot cap on top.

Moldings interrupted at former door location at west side of north wall.

Windows

West: 2 double-hung, 2-over-2, natural finish pine trim type T8. Twist sash lock at meeting rail. Sash cords missing.

South: Sash removed and replaced with sheet of glass. Frame and trim deteriorated.

Doors

Basement: 4-panel, natural finish pine trim type T8 with corner blocks. Early finishes, probably dating from 1885, are found on the basement side of the door and frame.

North: Door removed, natural finish pine trim type T8 with corner blocks.

Hardware

Basement door: Decorative steeple hinges, mortise lock with black porcelain knob, slide bolt.

Heating

2 radiators, 15 fin, 5 tube, under windows; 1942 steam piping above wood ceiling

Flue thimble on north side of chimney gives evidence for former stove.

Lighting

No lighting. Pipe for former gas light in approximate center of room.

Evidence for former electric wall sconces at center of north, west, and south walls.

Electrical

5 duplex outlets

Plumbing

Evidence in basement for plumbing at southeast corner; exact location of fixture(s) not evident because areas of former tile have been filled with plaster/mortar.

Features

Ghost of servants' call box at center of north wall; pattern matches existing call box in Room 112.

Recommendations

Replace missing window.

Repair deteriorated studs.

Replace existing wall plaster. Repair ceiling plaster.

Sufficient evidence is available to permit development of accurate plan for location of major features. Restoration of smaller, more detailed items, would be based on conjecture. Actual restoration of this area will depend upon the interpretive plan for the house.

Room 117, Pantry

Floor

1" x 3 1/4" pine boards. Holes from cut nails at former partition location.

Walls

Painted wallpaper on plaster on wood lath. Patches at former partition location.

Approximately 1/2 of the plaster is deteriorated to the point of requiring replacement.

Ceiling

Painted wallpaper on plaster on wood lath. Patches at former partition location.

Approximately 1/2 of the plaster is deteriorated to the point of requiring replacement.

Moldings and Wainscot

Painted wood base and shoe, trim type B4; wood originally had natural finish. Splices indicated changes in room configuration.

Windows

2 double-hung, 2-over-2, painted pine trim type T8 with corner blocks; sill cut away for former cabinet. Twist sash lock at meeting rail. Sash cords missing.

Doors

None

Hardware

Modern twist sash lock on window.

Heating

Hot-water radiator below window

Lighting

Centrally located electrical ceiling fixture

Electrical

Electric light with wall switch

2 duplex receptacles

1 220 volt outlet for range

Plumbing

Porcelain on cast iron sink with hot and cold water on east end of south wall

Gas pipe for former stove in northwest corner

Features

Wood storage cabinet in northeast corner; cabinet relocated from southwest corner

Recommendations

Replace damaged plaster.

Additional restoration will depend upon the use of this area of the house

Room 118, Entryway

Floor

1" x 3 1/4" pine boards covered with underlayment and carpet

Walls

Wallpapered plaster on wood lath; good condition

Ceiling

Painted plaster on wood lath; approximately 1/2 of plaster is deteriorated

Moldings

Natural finish wood base and shoe, trim type B4

Windows

Natural finish 2/2 double-hung sash; trim type T8 with corner blocks

Doors

Four panel natural finish door; trim type T8

Screen door with fixed transom on exterior

Hardware

Three, 5-knuckle hinges, 2 with steeple pins and one with ball pin; "Lockwood" mortise night-lock with modern cylinder; brass knob latch; twist-type dead bolt; modern slide bolt and chain receiver

Heating

12 fin, 5 tube hot-water radiator below window

Lighting

Centrally located electrical ceiling fixture

Electrical

1 duplex receptacle

6 wall switches

Battery-operated smoke detector

Plumbing

None

Features

Stairway with natural finish turned balusters and newel post

Recommendations

Repair damaged ceiling plaster

Remove inappropriate hardware

Further restoration will depend upon the planned use for this area

Room 214, Bathroom

Floor

Modern random width T&G flooring; removed as part of the investigations.

Original (ca. 1880) flooring 1 1/4" x 7" T&G. Later (ca. 1885) 7/8" x 3 1/4" T&G installed on joists raised above tops of original joists.

Single set of nail holes from modern flooring indicates that there was no finish floor in 1880; finish floor as a bathroom probably was linoleum, rather than wood or ceramic tile.

Holes in the lower flooring indicate locations for a sink and a tub along the north wall with a water closet in the closet.

Sections of flooring fastened with screws; these areas had been removed to permit installation/modification of gas piping.

Cut nail holes running east/west indicate position of former partition or shelving.

Walls

Painted wallpaper on plaster. The top layer of wallpaper appears to date from 1936 or later. Remnants of 1904 wallpaper can be found behind a former shelf bracket in the southeast corner, behind the former tub, and behind a wood rail in the closet. No remnants of 1880 or 1885 paper were found.

Ghosting on the plaster adjacent to the built-in cabinet on the north wall suggests the installation/alteration to plumbing following original plastering of the wall.

Ceiling

Painted wallpaper on plaster; wallpaper appears to date from 1936 work or later.

Moldings

Painted wood base and shoe, trim type BG6. Painted picture rail on north wall only.

Windows

Painted single-hung, multi-pane border sash; painted wood trim, type T10, installed approximately 1904.

Doors

Painted 4-panel; painted wood trim, type T10, with mitered corners and operable transom with 2-light sash.

Hardware

Plain 3-knuckle hinges, mortise lock with white porcelain knobs

Dutchmen at former cabinet-hinges on north side of closet door opening; cabinet-latch keeper on south side of door opening

Heating

Modern supply air southwest corner. No evidence for any earlier heat.

Plaster patch near ceiling may indicate former chimney thimble for stove.

Lighting

Electric 3-arm ceiling fixture in center of room; investigations indicate that this location never had a gas fixture.

Remains of gas wall fixture at east end of south wall; remains of electric wall fixture at west end of south wall.

Electrical

2 duplex outlets

Plumbing

Lead pipes for hot and cold water supply and for the sink and tub drains remain in the joist space along the north wall. A 4" trap collects the drains from the tub, the sink, and an unknown fixture ca. 5' to the north into a single area and discharges into a 2" lead drain line; this line discharges into a 4" cast iron drain and vent system.

Features

Wallpaper remnants and paint ghosting indicate the presence of a corner shelf to the south of the window.

Paint ghosting for possible water closet tank on east side of closet area.

2" diameter light-gauge galvanized pipe of unknown use spans north/south in east side of closet.

Recommendations

Sufficient evidence remains for accurately restoring the Bathroom to its 1904 appearance, if desired. Work required would include installation of plumbing fixtures, installation of reproduction wall paper, installation of linoleum based on prototypes, installation of a reproduction gas wall sconce, and removal of the modern electrical light and wall sconce wiring.

|||||

RECOMMENDATIONS

Many changes have been made to the Kitchen and Bathroom areas since the major remodeling of 1885. Decisions concerning the restoration of these spaces must be based on available evidence and on the proposed use of the building.

Based on existing documentary and physical evidence, the general layout of each area can be determined, as can surface finishes. Based on discussions with previous researchers, it is unlikely that additional information can be gained from further documentary research. Added physical investigations would require major removal of existing plaster and would be unlikely to provide significant further information. More specific details required for the restoration of each room would be based on speculation.

The General Management Plan does not address the possibility of interpreting either the Kitchen or the Bathroom. The Lawnfield Historic Structure Report does, however, raise the possibility of interpreting these spaces according to their historic uses; it also proposes, however, locating an elevator in the kitchen.

It is this author's recommendation that these two areas not be restored for two primary reasons. First, much of the restoration would be based on prototypes from similar homes and period publications, rather than on site-specific information. Second, interpretation of these areas would not add to an understanding of Garfield, since they were added following his death. For those interested in domestic technology, there are numerous other sites with kitchens and bathrooms which have been accurately restored.

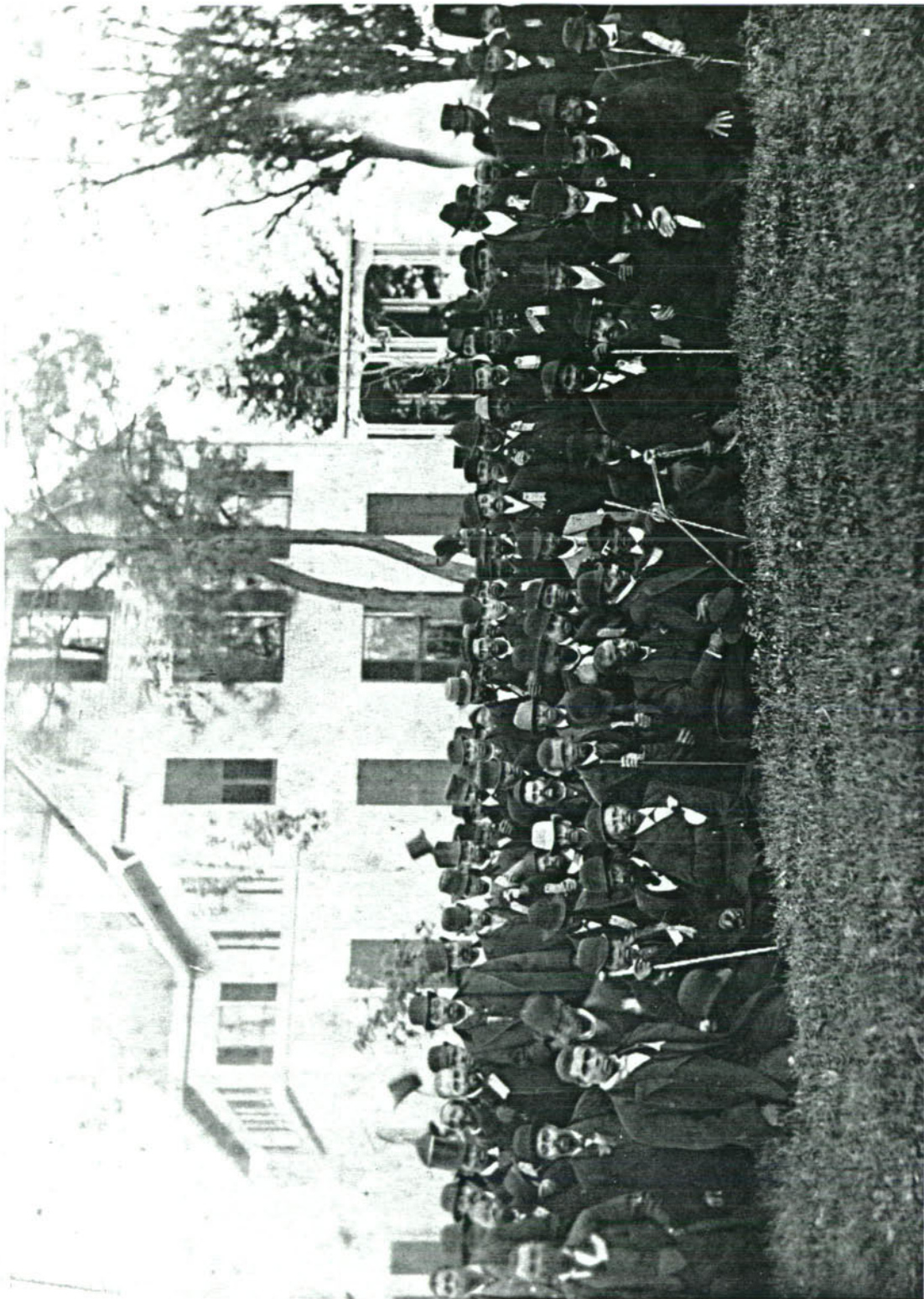


HISTORICAL PHOTOGRAPHS (HP)

The following historical photographs continue the numbering system established in the Lawnfield Historic Structure Report. Photographs with numbers below HP-90 were included in the original report; photographs with numbers HP-90 and above appear for the first time in this supplement.

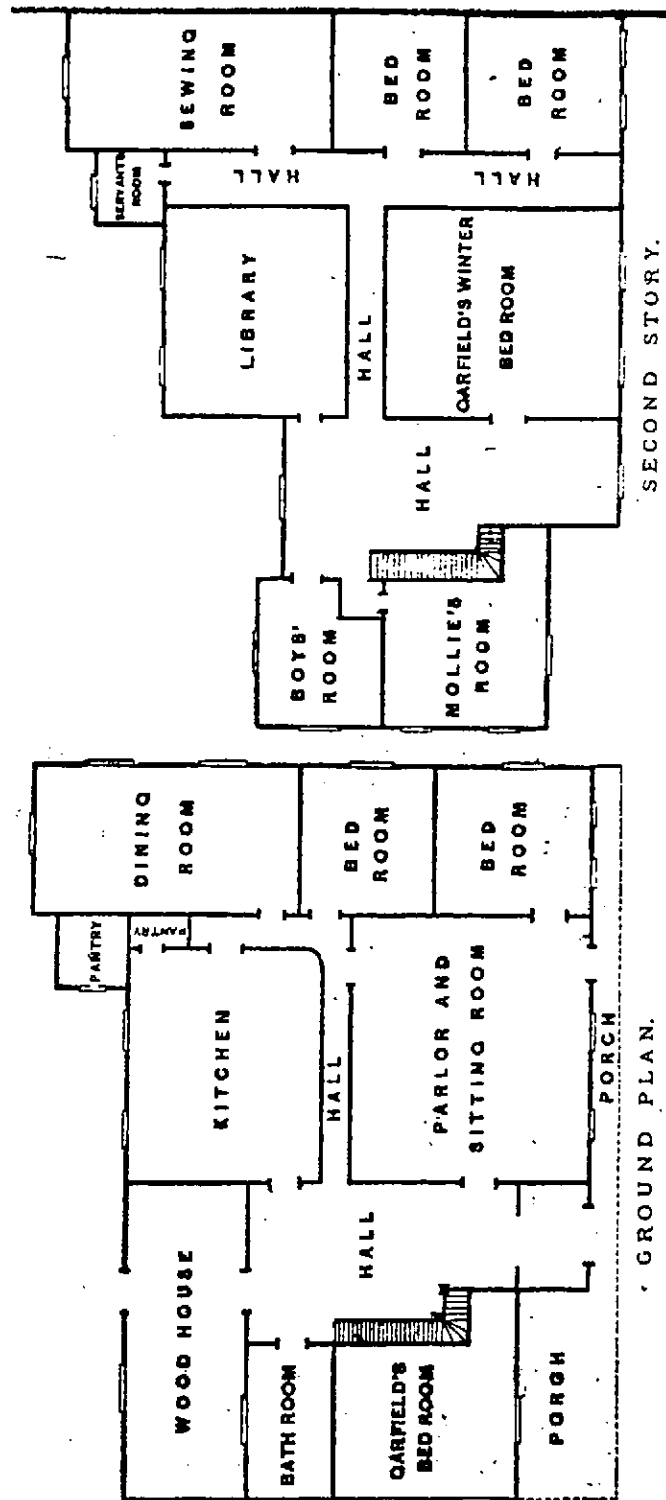


HP-3 Lawnfield, ca. Spring/Summer 1880, East and South Sides. Note the four window openings on the first floor level of the east side. Also note the hipped roof which, when projected to the house, would cover only the first three windows. This implies the presence of a flat-roof section to the north, probably one-story in height.



HP-7

Lawnfield, ca. Fall 1880, West and North Sides. Note the hipped roof and dormer on the far-east side; this indicates that Room 216 was significantly smaller as a "Sewing Room" than it was following the 1885 remodeling.



HP-12

Lawnfield, September 26, 1881, Floor Plans. The accuracy of this illustration is unknown. It does, however, show the dining room projecting beyond the main body of the house, as confirmed by HP-3 and HP-7. It also shows Room 214 as a bedroom rather than a bathroom.



HP-20 Lawnfield, ca. 1886, East Side. This photo shows the southeast wall with a second-floor window centered on the gable.



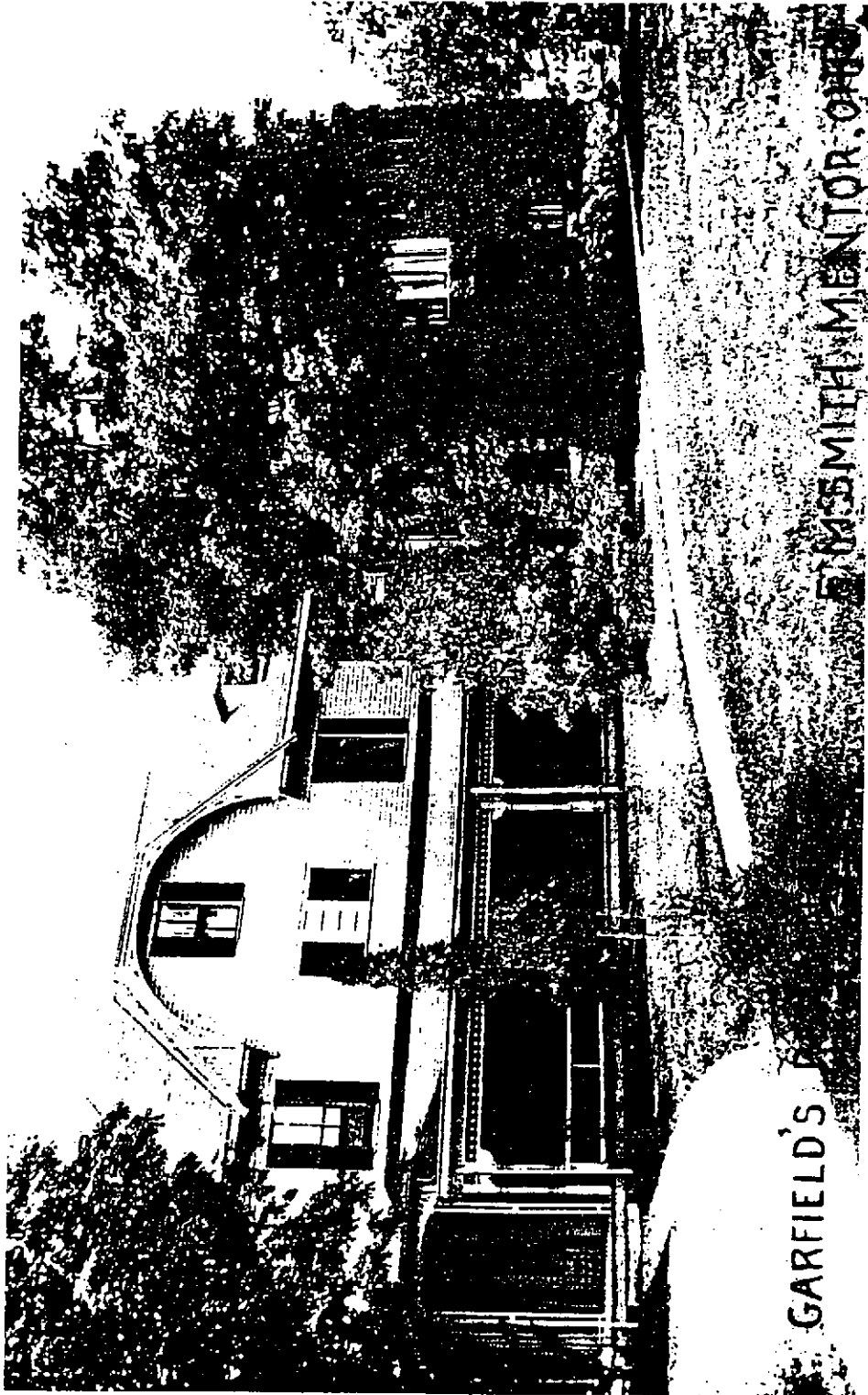
No 222

Pres. Garfield's House - Mentor O.

So. Ea View

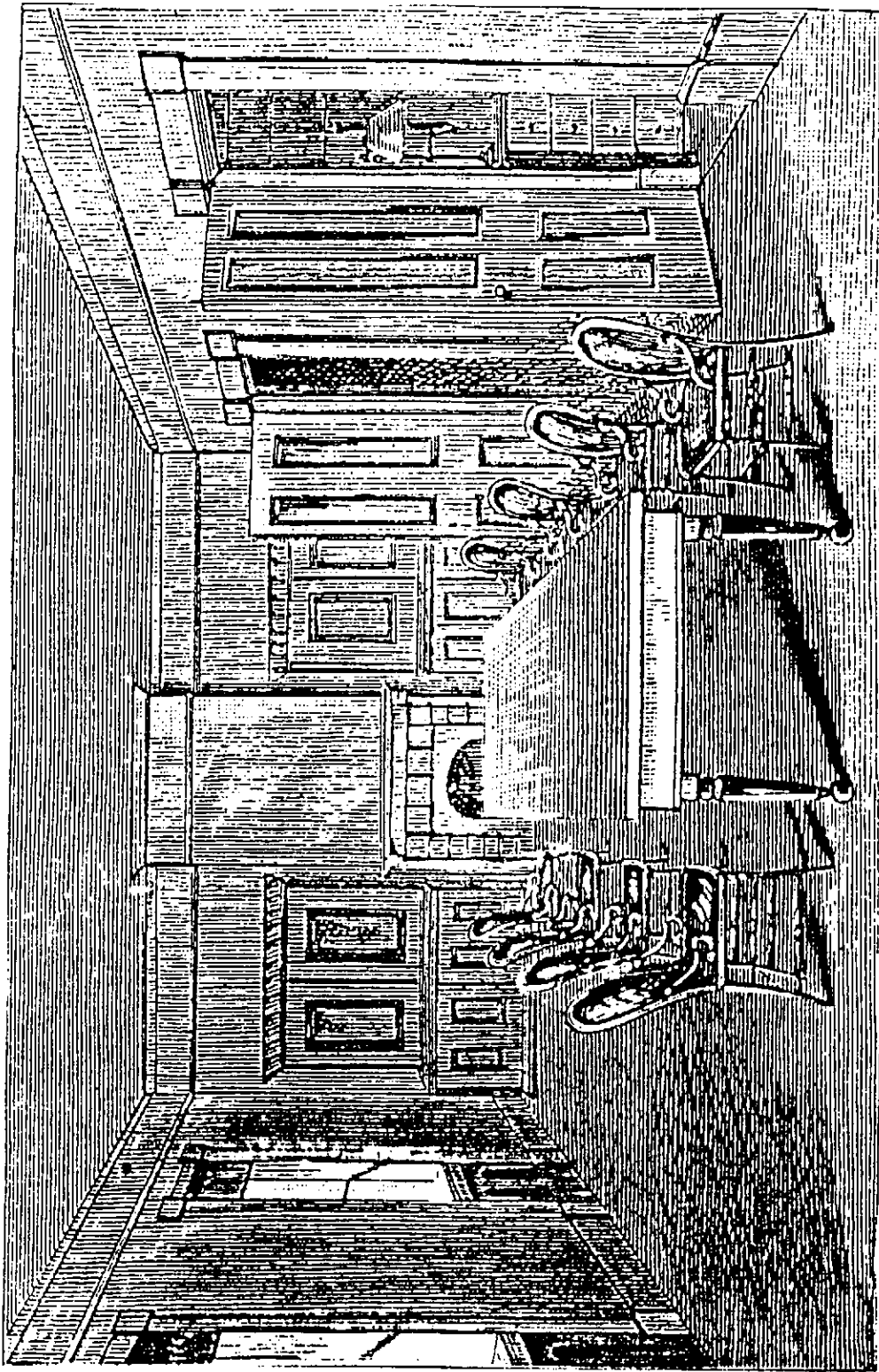
HP-21

Lawnfield, ca. 1888, East Side. This photo shows the southeast wall with a second-floor window centered on the gable.



HP-22

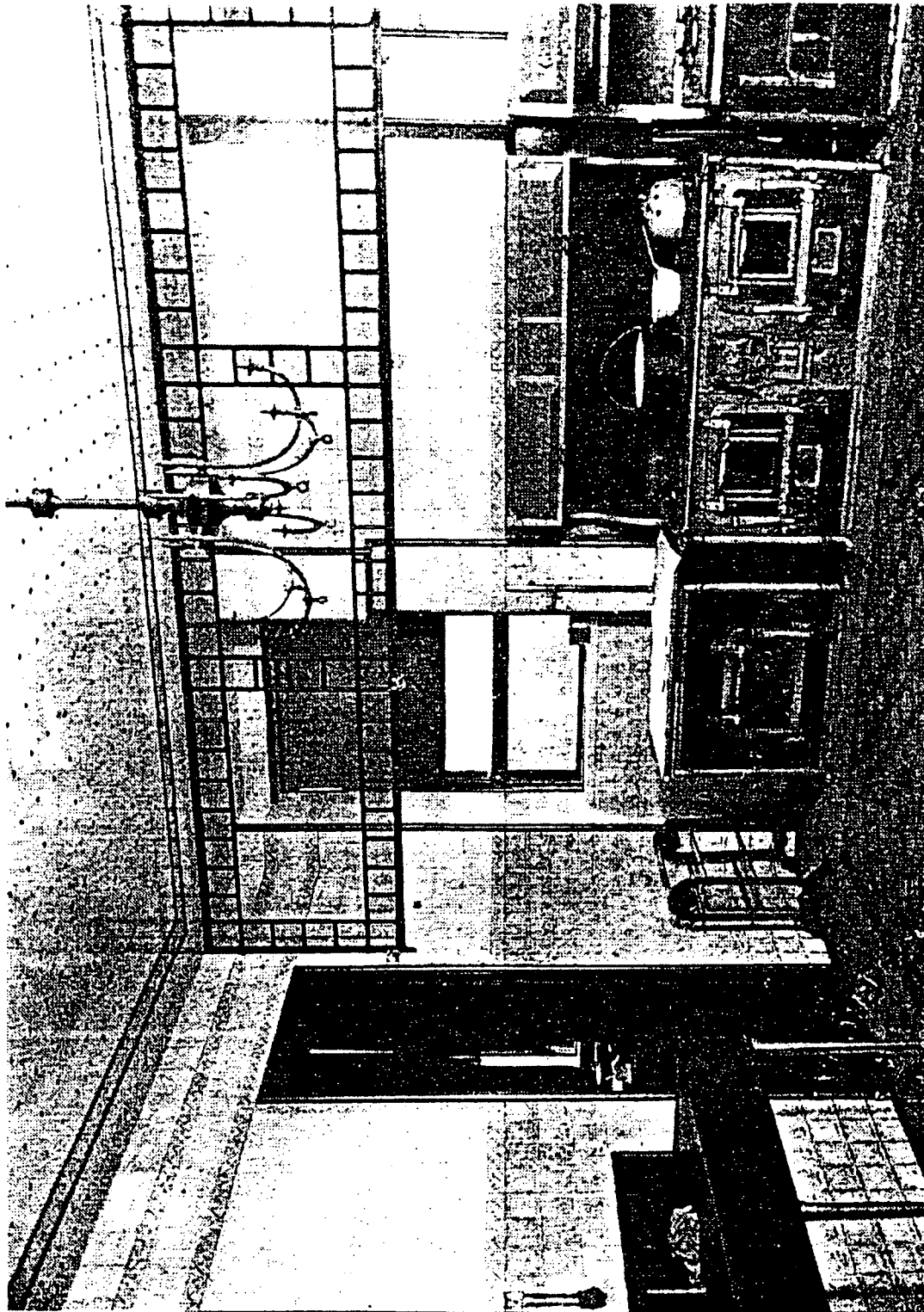
Lawnfield, ca. 1903, East Side. This photo shows the southeast wall with paneling at the center of the second floor. Note that the east porch has its original form; this porch was remodeled in 1904.



DINING-ROOM—GENERAL GARFIELD'S HOME

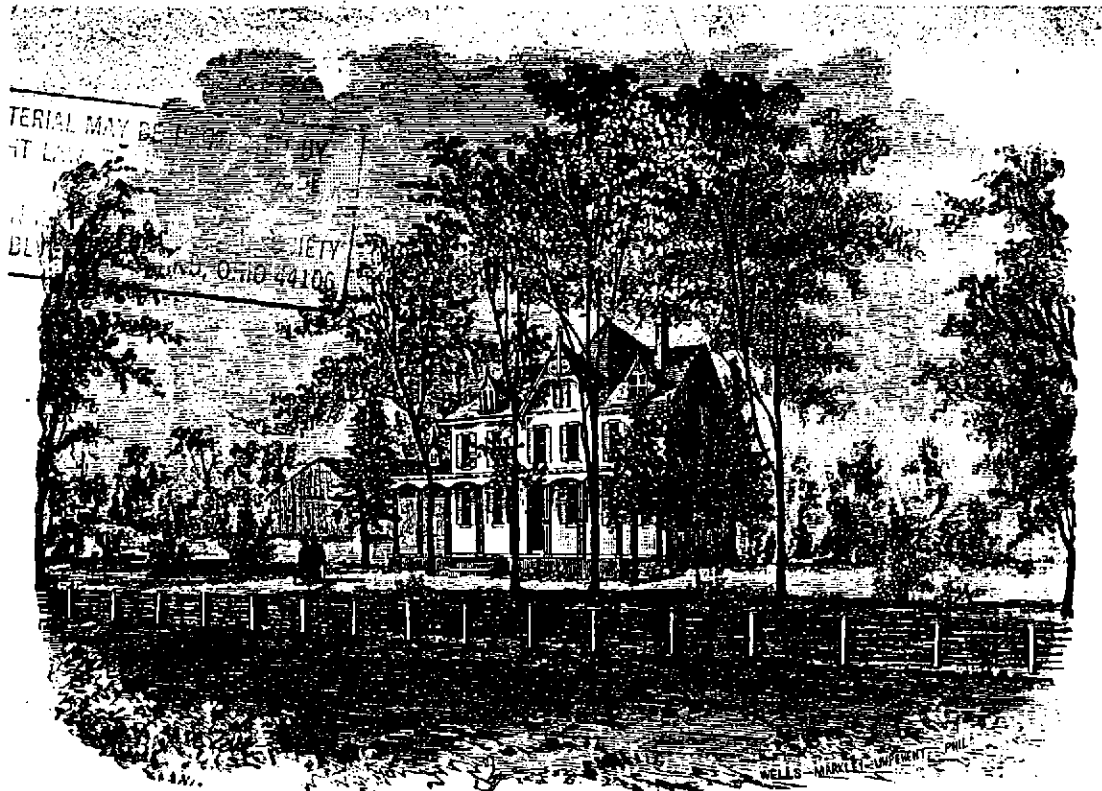
HP-59

Lawnfield Interior, ca. 1880, Dining Room. Note the two windows to the east, the two doors to the west, and the table with four chairs on each side. None of these would have been possible in a room limited to the size of the main building block.



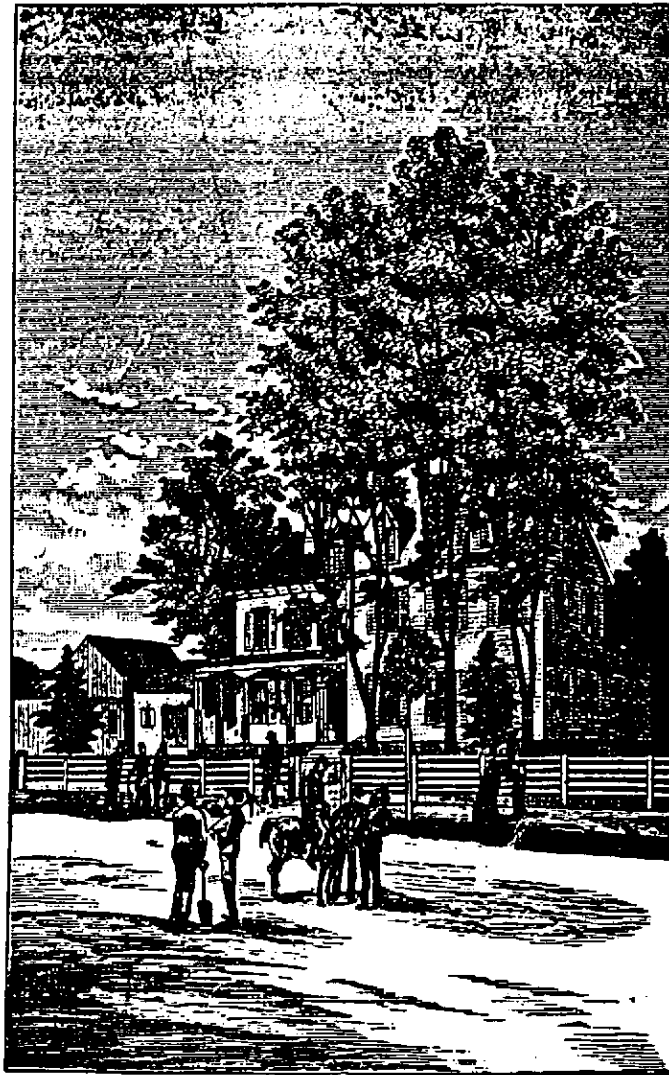
Kitchen in Residence of Mr. J. H. Wade, Euclid Ave

HP-79 Plate from "Some Selections from the Book of Coburn and Barnum Architects." This kitchen was designed at the same time and by the same architects as the Library Addition.



MENTOR—THE HOME OF PRESIDENT GARFIELD.

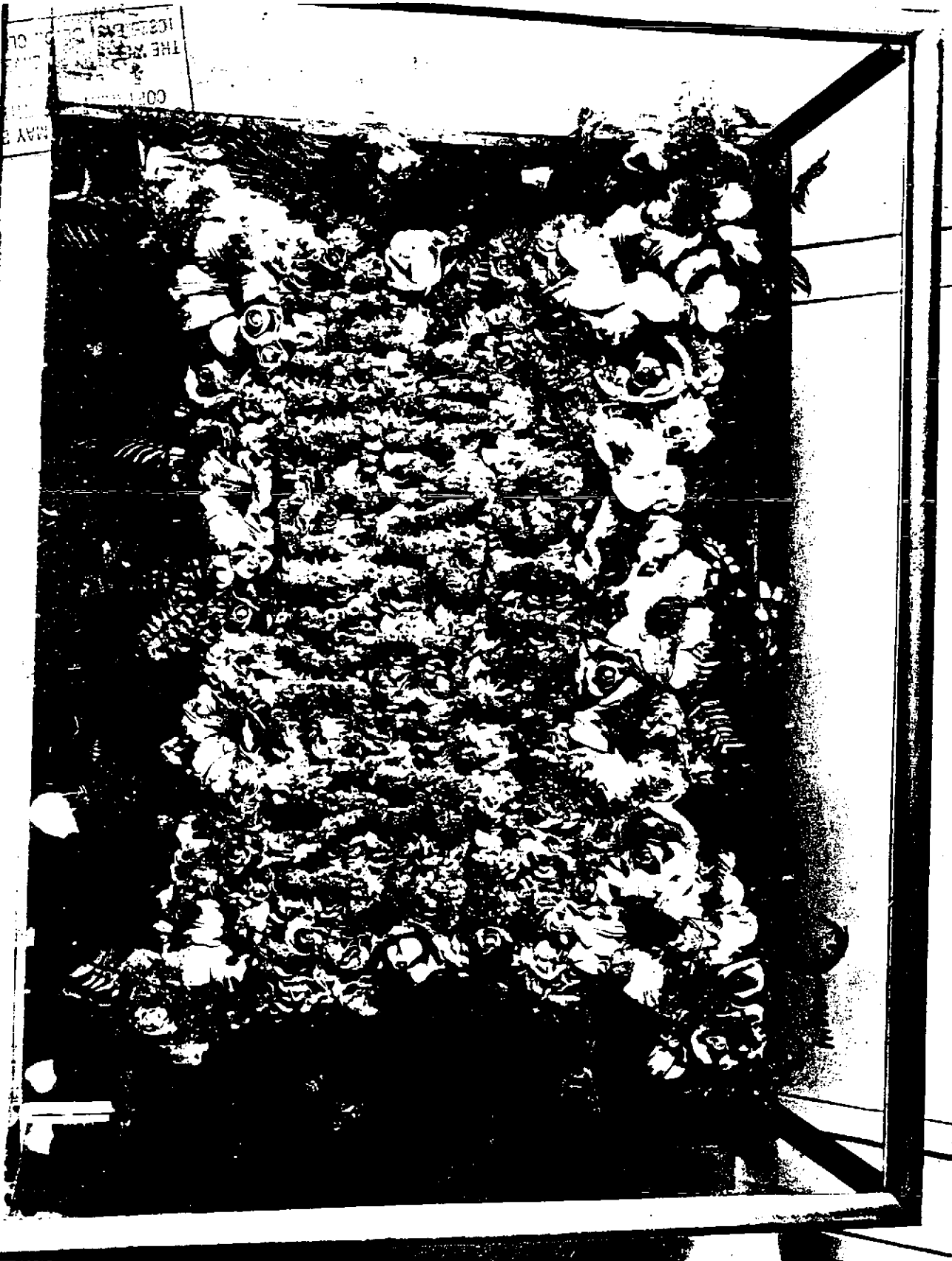
HP-90 Lawnfield, Etching ca. 1881. East elevation has windows centered on gable.



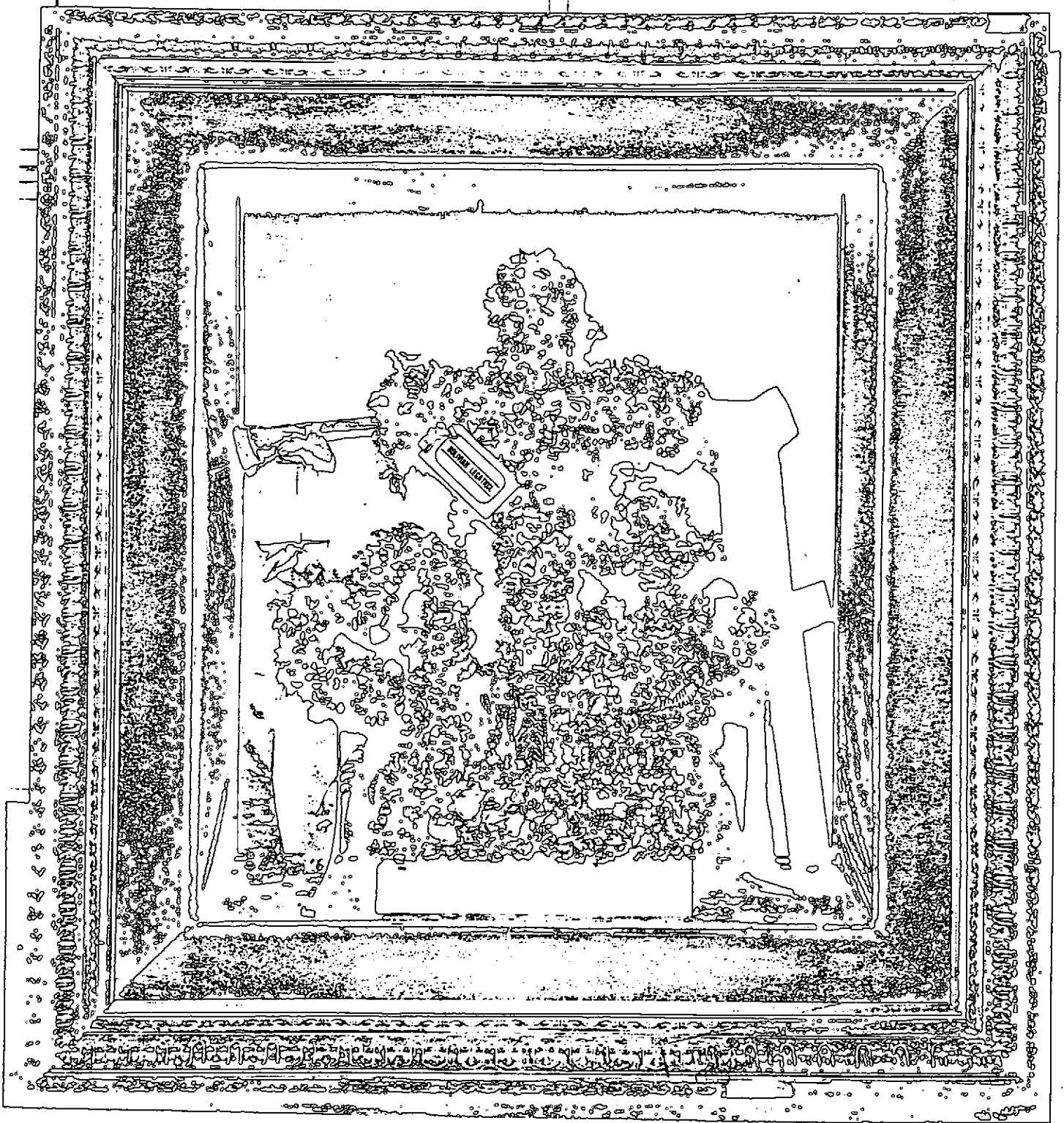
GEN. GARFIELD'S HOME, MENTOR, OHIO.

HP-91

Lawnfield, Etching from 1881 *The Life and Times of James Abram Garfield* by William-Ralston Balch. Note the single-story extension to the east wall.



HP-92 Funeral Flowers, Probably in Second Floor Bathroom. Some wallpaper evidence is visible around the display.

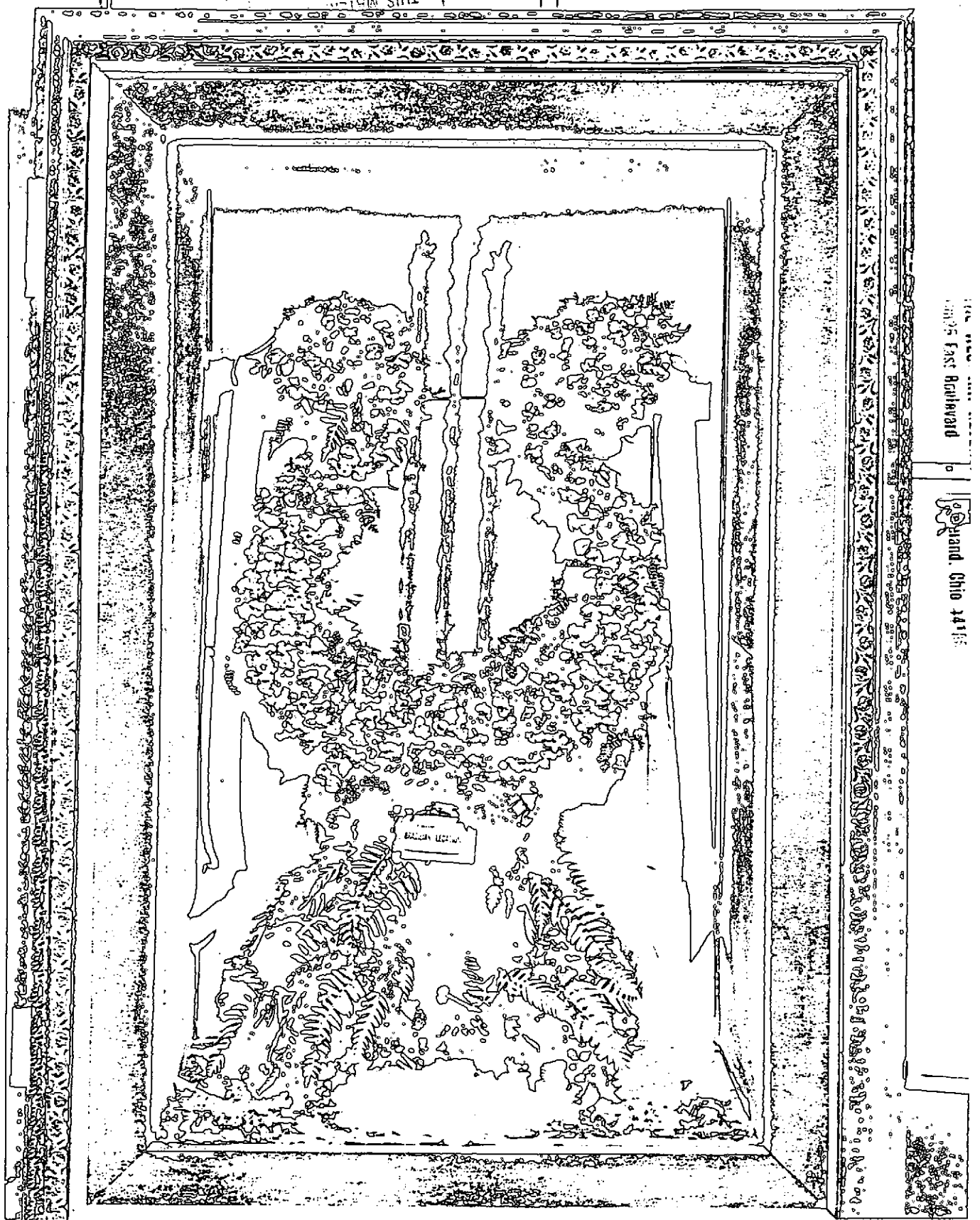


HP-93 Funeral Flowers, Probably in Second Floor Bathroom. Some wallpaper evidence is visible around the display.



HP-94

Funeral Flowers, Probably in Second Floor Bathroom. Some wallpaper evidence is visible around the display.



THE NEW YORK ...
... Fast Railroad
Cleveland, Ohio 44115

HP-95 Funeral Flowers, Probably in Second Floor Bathroom. Some wallpaper evidence is visible around the display.

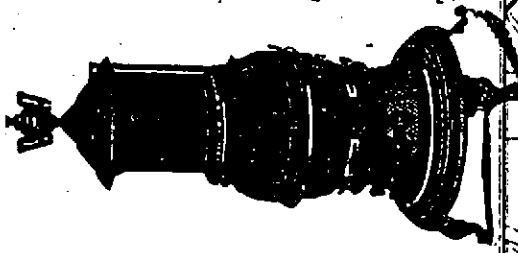
STATEMENT.

Cleveland, O. *April 30 1885*
M. J. Judd

To S. WOOD & SONS, Br.
CONTRACTORS & SEWER BUILDERS
 40 Michigan Street.

Particular attention given to House Sewer Connections.

<i>March 26</i>	<i>5</i> <i>ft</i>	<i>3</i> <i>Pipe</i>		<i>90</i>	
	<i>1</i>	<i>3</i> <i>Elbow</i>		<i>36</i>	
	<i>10</i>	<i>6</i> <i>Pipe</i>		<i>360</i>	
	<i>2</i>	<i>6</i> <i>Elbow</i>		<i>120</i>	
	<i>1</i>	<i>6x6 Y</i>		<i>72</i>	<i>678</i>
<i>April 2</i>	<i>56</i> <i>ft</i>	<i>6</i> <i>Pipe</i>	<i>31</i>	<i>2016</i>	
	<i>2</i>	<i>3</i> <i>Pipe</i>		<i>144</i>	
	<i>1</i>	<i>3x3 T</i>		<i>36</i>	
	<i>1</i>	<i>3</i> <i>Elbow</i>		<i>30</i>	<i>2226</i>
					<i>\$29.04</i>
<i>July 2 Paid by Judd to S. Wood & Sons</i>					



TO ALL BILLS RUNNING OVER 30 DAYS, INTEREST WILL BE ADDED.

Cleveland, O. April 26th 1880

Mr. Dr. J. P. Robinson, 2nd Gen. J. C. Gasfield.

Bought of **J. E. HALL**

MANUFACTURER OF

TIN, COPPER AND SHEET IRON WARE,

And Dealer in Parlor and Cooking Stoves of Every Variety.

HOUSE WARMING AND VENTILATING FURNACES.

TERMS CASH.

327 SUPERIOR STREET, (Opposite Case Block.)

T. G. BOWDICE & CO., PRINT. 33 ST. CLAIR ST.

Apr. 13.

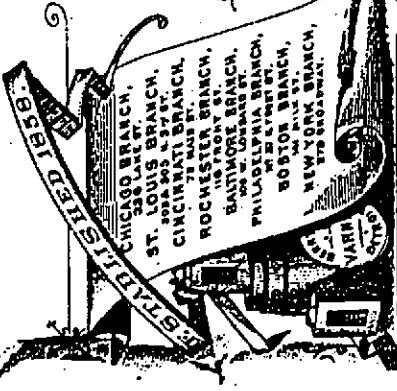
No 1 S.H. Stewart Stove.
" 1 Open front wood stove.
" 1 S.H. Tin warming stove.

17.00		
12.00		
2.50		
31.50		

All claims for damages must be made within 20 days after receipt of Goods.

Detroit, Jan 1st 1880

Messrs. J. A. Garfield. Canton. Ohio



BRIGHT BRYAC BROTHERS

VARIOUS LAYERS AND CURERS

COLLECTIONS MADE FROM
DETROIT OFFICE

CP 2

TERMS

Can 75 ¹ Gau Walnut Hand Oil Finish	2	10	
" 50 ¹ 2 Light Oil do 2 ¹	4	50	6 60
Return Chgs			20
Pay Expes			6 85
Rec'd Pay for exces			1 ¹ 80

Hon James A. Gundersen
 Paymaster U. S. Army
 Fort Snelling, Minn.

		BATHROOM ILLUS. O.	
15 Gall Raw Gussel Oil	81	12.15	
200 ^{1/2} lb P Lead	9 1/2	19.00	
15 ^{1/2} French Paper	40	..60	
2 Gall Shellac		7.50	
5 ^{1/2} " Orange Varnish	16 1/2	10.00	
10 ^{1/2} " French Green Varnish	2 1/2	2.50	
1 ^{1/2} " China Yellow (L)	22	..22	
33 ^{1/2} " French Green	20	7.00	
1 ^{1/2} " Eddy Stamp Black	37	..37	
1 can for Varnish		..75	
Receipt for Varnish		60.09	
J. P. Robson, M. E. S. Co.			

Main St., Cor. St. Clair, new Bowling House.

McBRIDE & Co.
 Have in Stock
 A FULL LINE OF
 PAINTS & OILS,
 VARNISHES,
 COLORED BRUSHES,
 DYE STUFFS,
 FEATHER DUSTERS,
 CHINA TOY GOODS,
 PORTMONIES,
 POCKET KNIVES,
 STEREOSCOPIC VIEWS,
 STOLING ACCORDIONS,
 LAMPS & LANTERNS,
 &c., &c., &c.

Mr. J. A. Gardner
 Painesville, O. May 13 1880

Bought of McBRIDE & Co.

DRUGGISTS & GROCERS,

Fancy and Toilet Articles, Perfumery, Dye Stuffs, &c., &c.

Physicians' and Family Recipes Carefully Compounded.

24 1/2 Gall. Petroleum	46	1 10
2 Gall. Glycerine	55	1 10
1 " " Alcohol	375	3 25
2 " " Olive Oil	20	40
5 1/2 " " Castor Oil	35	1 75
5 1/2 " " Sassafras Oil	20	1 00
1 " " Turpentine		50
		\$ 9.60
<p>Rec'd Pay by J. A. Gardner</p> <p><i>McBride & Co.</i></p>		

SPECIFICATIONS.

Of the works and materials required in the erection, construction, and completion of Design 40, Plate 30.

DIMENSIONS.—The drawings must be accurately followed according to their scale, and preference given to figured dimensions over scale.

Detail drawings will be furnished, any work constructed without such drawings must be removed if required, and work replaced at contractor's expense. The building to be in size as shown and figured on drawings. Cellar, 6' 0"; first floor, 9' 0"; kitchen, 8' 3"; second floor, 9' 0"; over kitchen, 8' 0"; all in the clear, divided, subdivided, and built in exact accordance with plans and specifications.

MASON WORK.

EXCAVATOR.—Excavate in depth for the cellar, area, foundations, and footings of all the walls and chimneys, also for all drains, cistern and cess-pools. Dig trenches for footings of all walls 8" below level of cellar bottom; fill in around walls as laid; grade the excavated earth around the building as may be directed. Lay aside the top soil, at commencement, and replace over the graded surface at completion.

STONE WORK.—Build foundation walls of good building stone, of flat bed and firm build, laid in clean, sharp sand, lime and cement mortar, in parts of one of cement and two of lime. Lay down footings under all the walls of the building of flat stones, not less than 20" long and 6" thick, bedded crosswise of the walls on the natural, undisturbed earth; build the walls from thence to grade level, by and full to a line on the inner face, and flush and point at completion. These walls to average 1' 6" in thickness, the greater breadth at the base. Lay down substantial foundations under chimneys and piers in cellar; put down clear of frost, solid foundations under piers supporting porches and verandas, also under all exterior steps. Area copings and steps to be of blue stone, steps properly walked in on each end.

UNDERPINNING.—Build the underpinning walls 16" thick from grade level, and extend up 2' 4" in height, with good underpinning stone, level beds, plumb joints; all angles and jambs to have chisel draft on edges, also on top to receive woodwork, and to be properly pointed and pencilled with a white joint at completion. Window sills to be of blue stone; such portions of walls as are covered up with veranda to be rough work.

CESS-POOL.—Stone up cess-pool 3 feet in diameter and 8 feet deep, covered with rough flag, provided with man-hole, etc., complete; make the necessary connections with the cistern to receive the overflow through cement pipe of the required size. Also stone up, in like manner, cess-pool, to receive wastes from house, and connect with 6" cement drain-pipe.

BRICK WORK.—To be laid up with best quality hard-burned brick and clean, sharp sand, lime mortar.

PIERS.—Build piers in cellar 16" square, as shown, and cap with flat stone, size of piers; piers supporting porches and verandas 12" square.

CHIMNEYS.—Build the chimneys as shown on plans; carry up the flues of uniform size, to be well plastered, furnished with proper stove collars and ventilating flues where required; turn arches to all fire-places, and turn trimmer arches under all hearths; top out above the roof, as per detail drawings, with selected brick laid in black mortar, close joints, jointed and cleaned down. Face the throat, breast and jambs of kitchen fire-place with selected brick, laid in black mortar, provided with slate shelf, to have blue stone hearth as shown on plans. Build fire-place in hall with buff brick, laid in red mortar, angles milled and as per details, also furnish the necessary brick, mortar and plaster for setting the mantels and range.

CISTERN.—Build a cistern where directed, 10 ft. diameter and 10 ft. deep, with 8" walls laid in and smoothly coated on the inside with cement; cover man-hole in neck with flag stone, connect to leaders with 4" and 6" vitrified pipe.

LATHING.—Lath all walls, ceilings, and work that is furred off, throughout first and second floors, with sound, seasoned lath, securely nailed to each stud, and joints broken every tenth lath.

PLASTERING.—All walls and ceilings throughout first and second floors, plaster with one good coat of brown, well haired mortar, and finish with one coat of white hard-finish. All angles to be sharp and regular in form, walls to be straight and plumb, and in all cases to extend clear down to floors.

CORNICES.—Run stucco cornices, as shown by the details, in hall, parlor, library and dining-room of first floor.

CENTRES.—Put up four seat and appropriate centres, of such pattern as selected by owner.

ARCHES.—Finish and mold the arches in hall as shown by the detail drawings.

FINAL.—White wash walls in laundry, and do all necessary mending of walls after other craftsmen, and deliver the mason work up in thoroughly good order at completion; make the floors broom-clean from time to time as required; also remove all mason's waste materials and rubbish accumulated during the progress of the works, from off the premises and leave everything in a perfect, complete and satisfactory state.

CARPENTER.

TIMBER.—The whole of the timber used in and throughout this building to be the best of their several kinds, well seasoned and free from sap, shakes and other imperfections impairing its durability and strength.

FRAMING.—The frame to be what is known as half balloon, the studs to be tenoned into sills and plates, to be braced with long angle braces cut in barefoot and well spiked. The girts to be of yellow pine, notched into and well spiked to studs. Do all necessary framing around stairways and chimneys, all properly mortised and tenoned together and all to be done in a thoroughly workmanlike and substantial manner.

FRAME TIMBER.—Sills and girders, 6"x8"; posts, 6"x6" with inside angle cut out to make them 4" from faces. Girts 1 1/2"x4"; plates, 4"x5"; first floor timbers, 2"x10"; second floor, 2"x8"; attic 2"x6"—all 16" centres; header and trimmer beams, 3" thick, all floor timbers under partitions running same way to be 4" thick, roof rafters, 2"x6"—2 ft. centres; hip and valley rafters, 3"x8". Door and window studs, 3"x4" intermediate studding, 2"x4"—16" centres; long braces, 2"x4". All main partitions to be set with 2"x4" studding—16" centres, to be set as the frame is raised, and foot on girders, to have 3"x4" plates on which to foot second story partitions and carry floor timbers; other partitions set with 2"x3" studs—16" centres, and all partitions that are directly over each other to be set in like manner to above, all to be well braced and spiked; all angles to be formed solid, and all partitions to be bridged once in their height. Porch and veranda sills, 4"x6"; floor timbers, 2"x6"—16" centres; plates, 4"x5"; rafters, 3"x5"—2 ft. centres.

BRIDGING.—All the floor timbers to be bridged through centres with 2"x2" cross-bridging, properly cut in between timbers and nailed with two 10d. nails at each end, also furnish any other timber of the required size and necessary to fully complete the works.

FURRING.—Properly support and furr under stairs, furr for arches, and do any other furring required by the design.

SHEDDING.—Cover the entire frame with tongued and grooved boards, not to exceed 6" in width, nailed through each edge to every stud with 10d. nails; this includes all roofs.

LUMBER.—The lumber to be of white pine, unless otherwise specified, well seasoned and dry, and free from shakes, loose knots and other imperfections. Sashes and panel work to be perfectly clear lumber.

CLAPBOARDING.—Cover all sides with clear pine clapboards, put on with 8d. box nails, with not less than 1 1/2" lap. These boards to be underlaid with beaver-brand, rosin-sized, waterproof sheathing felt, which also place under corner boards, casings, etc., so as to lap and make a tight job.

CORNER BOARDS, CASINGS, AND BANDS, 1 1/2"x7"; bands to be rabbeted top and bottom for clapboards.

WATER TABLE.—To be furred off from frame, and to have beveled cap 1 1/2" thick.

CORNICES.—To be formed on 2"x6" rafter feet, cut as shown, and spiked on to rafters at plate; the plancier to be formed by laying narrow pine matched boards, face down on rafter feet; barge boards and gable staffs to be 2 1/2" thick and as shown. Brackets, as shown, and all as per details. Gutters to be of galvanized iron, graded to shed water to points indicated on plan.

LEADERS.—Furnish all the required leaders of sufficient size to convey the water from the gutters to the cistern and the tank in attic; said leaders to be firmly secured to building.

FINAL.—To be of wrought iron, as per details, to have galvanized iron cover to base.

WINDOW FRAMES.—To be made in the ordinary manner; cellar frames to be made out of 2" plank, rabbeted for sash; sash hinged to top and to have suitable fasteners to keep open or shut; all sash to be of seasoned pine, 1 1/2" thick, and double hung with best hemp cords, iron weights, and 1 1/2" shaft axle pulleys, and to be glazed with English sheet glass, all to be well bedded, bradded and puttied; window in dining-room, on to veranda, to be hinged; window sills 2 1/2" thick.

BLINDS.—Outside blinds to all windows, except cellar, hung in two folds, with the best kind of hinges, and secured with best style fasteners, and painted three coats of paint, invisible green.

DOOR FRAMES.—Outside door frames to be of plank, rabbeted, and to have 2½" oak sills.

VERANDAS.—Construct veranda and porches, as shown, and as per detail drawings; steps, 1½" thick, risers 1", to have cove under nosings; lay the floors with 1½" x 3½" flooring, blind nailed to beams, and to have paint joints; rafters to be dressed and chamfered; lay on rafters, face down narrow beaded ceiling of even widths. Columns, rails and brackets to be as shown; cornices formed with beaded ceiling on rafter feet in like manner to main roof; rafter feet to be cut as shown; panels formed under floor as shown.

FLOORS.—Lay the kitchen floor with yellow pine, 1" x 3", blind nailed to every beam; all other floors lay with white pine, not to exceed 5" in width, to be well laid, joints broken, and blind nailed in a thorough manner. Lay front hall floor with yellow pine and black walnut in alternate strips, to have neat border.

WAINSCOTING.—Walls of kitchen to be wainscoted 3 ft. high with beaded battens ½" x 3", and to have neat bevelled moulded cap.

CASINGS.—Case all doors and windows throughout, before plastering, with ½" casings, and trim hall, parlor, dining-room and library with a 1½" x 3" hand-mold; elsewhere trim with 1" x 1½" hand-mold; windows in above rooms to be finished down to floor with framed and moulded panel-backs to match doors; other windows to have neat stool and apron finish; door-jambes to be 1", beaded on edges, and rabbeted for doors; no moldings in closets.

BASE.—Put down after plastering, 8" moulded base in principal rooms first floor; 7" plain beveled elsewhere.

DOORS.—To be made in size and thickness as marked on plans; front doors as per details; top panels glazed with colored glass; all other doors to be six-panel ogee moulded solid.

SADDLES.—Put down moulded hard-wood saddles to all doors.

STAIRS.—Stairs to cellar to be of plank, no risers, to have flat rail on side; main stairs as shown 1" risers, 11" treads, with returned moulded nosings, to be well supported and rough bracketed, steps housed into strings; newel posts, rails and balusters to be of black walnut, as per details. Back stairs, and stairs to attic to be box stairs.

WASH TUBS.—To be constructed out of 2" plank, rabbeted and put together with white lead joints, and to have hinged lids—these tubs to be 14" deep.

SINK.—Cell up under sink with narrow beaded battens; to have door properly hung; cell up splash back 10" high, and cap same as wainscoting also place drip board complete.

WASH BOWLS.—Cell up under with narrow beaded ash battens, and hang door to form a closet under.

BATH-ROOMS.—Wainscot walls of bath-room, 3 ft. high, with narrow beaded ash battens, and cap with neat cap; water closet to be fitted up with seat, riser and nutre-clamp flap, hung with brass bolts.

BATH-TUB to be cased in most approved manner, all of ash.

TANK.—Construct out of 2" plank, a tank in attic, over bath-room 7 ft. long, 5' 6" wide and 3 ft. deep, framed, braced and supported in a substantial manner; the bottom of tank to be furred and plastered in bath room, and finish 7' 6" in the clear.

PANTRY.—To have counter-shelf and four shelves above; closet for barrel of flour, with lid in counter-shelf; also put in two dove-tailed drawers, and put up one dozen pot-hooks.

PASSAGE.—To have table with closet under, and three dove-tailed drawers; also shelves as shown.

CLOSETS.—To have shelves on neat strips, and double wardrobe hooks 8" apart, on neat moulded strips.

FURNITURE.—To front doors to be Tucker bronze; other doors, first, floor, principal rooms, Hemlock Eastlake pattern; other doors, mineral japanned, ash fasteners to correspond; all small closets to have suitable catches; all drawers to have suitable pulls, locks, etc., complete.

LOCKS.—All doors throughout to be secured with mortise locks, of best city make, brass fronts, bolts and keys; outside doors to have suitable shove bolts.

STOPS.—Put rubber-tipped door-stops in base where required.

HINGING.—Hang all doors with loose joint butts, of appropriate sizes; all doors over 7' 6" high to have three butts each. Sliding doors to run on brass track and patent slot sheaves.

BELL.—Front door to have bell connected with kitchen, with pull, etc., complete.

NIGHT-LATCH to front door, combined with lock, and supplied with two keys.

COAL BINS, and partitions in cellar, to be boarded up with matched boards, as shown; doors in cellar to be batten doors.

MANTELS. Construct mantel in hall of ash, as per details; furnish and put up four slate mantels; all hearths of slate, to have summer fronts, etc., complete, and to cost \$100 and be selected by owner; mantels in bed-room on first floor, and two chambers, to be neat wooden mantels.

FINAL.—Any other work that is shown by the drawings, and necessary to fully complete the work, to fully complete the same to the true intent and meaning of these particulars, is to be done without extra charge.

SLATER.

Cover all roofs with best Bangor, Pa., black slate, of small size, laid with a lap of at least 3" of the third over the first; each slate to be nailed with two galvanized iron nails; lay under slate heavy tarred felt paper; cover the ridges with zinc, also flash valleys and chimneys with heavy zinc, and secure with slater's cement. To be a first class job, and warranted tight for two years.

PLUMBER.

IRON SOIL-PIPE.—Furnish, and connect with drain, a 4" cast iron soil-pipe, extend up and connect with water closet in bath-room through 6lb. lead trap; soil-pipe to be properly secured and the joints caulked tight with lead, and extend up above roof and cap with ventilator. All traps in plumbing to have 1" vent pipes of lead run up to attic and connected with soil or outlet pipe up above roof.

SUPPLY-PIPE.—Furnish a ½" B lead pipe, connect with the attic tank, and run to and connect with boiler in kitchen; tank to be lined with 4lb. lead, and to have 2" overflow run through outside wall.

BOILER.—To be a 25-gallon, galvanized iron, of the best construction, connected to water back of range, through double A lead pipe and brass couplings; these pipes to be left ready for connection.

SINK.—To be 20" x 30" x 6" cast iron, galvanized, supplied with hot and cold water through ½" B lead pipe, ½" brass draw cocks, to have 2" waste, properly trapped and connected.

PUMP.—Put in a combination lift and force pump, to cost \$12: connect the same with cistern and well through 1½" B lead pipes, provided with stop cocks, one on each pipe, placed beneath the pump, connect with tank in attic through 1" B lead pipe and run tell-tale back from tank to sink.

WASH TUBS.—Supply the two wash tubs in laundry with hot and cold water, through ½" B lead pipe and brass thimble tray draw cocks, to have 2" main waste and 1½" branch wastes, properly trapped and connected.

WASH BOWLS.—To be of Wedgewood ware, and to have marble counter sunk tops and surbases, supplied with hot and cold water through ½" B lead pipe and compression double nickel plated draw cocks, and plated plug and chain; to have 1" lead wastes, properly trapped and connected; lead pans to each with ½" lead waste run down to underside cellar ceiling.

WATER-CLOSET to be a Harrison best closet, with patent drip tray; also patent shut-off cock to regulate flow of water to bowl; to be set and fit up in a perfect, tight and complete manner.

BATH TUB.—To be a 12oz. sheet-copper tub, well tinned and polished, supplied with hot and cold water through ½" B lead pipe and nickel-plated draw-cocks; also to have plated plug and chain; also rubber hose shower-bath attachment; waste, 1½" lead, properly trapped and connected.

COCKS.—Put in the necessary stop-cocks over the boiler to shut the water off from the upper part of the house; also put in a lead branch connected with drain with stop-cock for emptying the boiler; also put in one draw-cock in cellar and all other stop and draw-cocks necessary to make a complete and first-class job; all pipes to be graded, so that if the water is shut off they will drain dry, and the whole of the work to be done in the very best and workmanlike manner, and delivered up in a complete and perfect state at completion.

PAINTER.

Properly stop and otherwise prepare for and paint all wood work that is customary and usual to paint, both on the interior and exterior, two good coats of the best white lead and raw linseed oil paint.

Paint finish invisible green, and gild the tips with gold leaf.

Grain the wood work in kitchen and back hall light oak; grain dining-room and library walnut and maple; paint parlor and hall in tints; elsewhere paint in one color.

All hard wood to be properly filled with Wheeler's patent filler and finished with two coats of Crockett's Preservative No. 1, properly applied and rubbed down smooth; all grained work to be varnished. Fill the front doors with Wheeler's filler and finish with two coats of Crockett's Spar Composition and rub down.

Paint clapboards light olive drab; paint corner boards, casings, etc., Indian Red; pick out all chamfers and cut work in black, paint sash Venetian red; Veranda ceilings ultramarine blue, with rafters Indian red; and do any other painting as required by the design, and necessary to fully complete the same.

SPECIFICATIONS.

SPECIFICATIONS of the Materials to be Furnished and Labor to be Performed in the Erection and Completion of a Wooden Dwelling-House, according to a set of plans, shown on Plate 2, furnished by L. Underwood, Architect, 13 Exchange Street, Boston.

GENERAL DESCRIPTION.

The size of the house and the size and arrangement of all the rooms, etc., are to be as shown on the plans, which are to be considered as a part of this specification; and which, with the writing and figures thereon, together with the detail drawings, are to be adhered to in every respect. The figures in all cases are to take the precedence of measurements on the plans.

EXCAVATION, STONE WORK, &c.

The contractor is to do all of the excavating for the cellar, drains and cistern, dig well, etc., and to put in the cellar and bulkhead walls, build foundations for piers and chimneys, and to do all the stonework necessary to receive the frame. The cellar and bulkhead walls are to be 18' thick at the bottom and 14" at the top, built with stone laid in cement mortar, and are to be carried up to the proper height to receive the sills. The cellar is to be 8' 6" deep in the clear of the joists. There is to be a dry well, 4' in diameter at the bottom and 2' 6" at the top, and 6' deep, built where shown on the plans. The walls are to be of stone laid dry, carried up to within 18" of the top of the ground and covered with flagging stones. There is to be a 5' vitrified earthenware drain-pipe from the waste-pipe to the sink, to the dry well, provided with a stench trap. The cellar wall above the grade is to be built of large stone, with an even face on the outside. The joints are to be well pointed and drawn. There is to be a well located as per plan, and bricked up with a 4' wall of hard burned brick, laid in cement and is to be covered with flagging stones.

All earth that is excavated is to be deposited in such places in the lot as the proprietor may direct

BRICKWORK.

Piers are to be built, as shown on the cellar plan, with good hard burned brick, and carried up to the sills. The chimneys are to be built, as shown on the plans, of a good quality of chimney brick, and to be topped out with good hard burned brick of uniform color, according to designs given in the elevations. All of the flues are to be fastened throughout on the inside. There are to be funnel irons, of such sizes as may be directed, put in the chimneys, so that stoves may be put up in all the rooms.

There is to be a rain-water cistern, as shown on the plans, of 2,500 gallons capacity, built in the usual manner, with hard burned bricks laid in cement, and is to be thoroughly cemented on the inside, and provided with a flagging stone cover and a vitrified earthen overflow pipe connected with the drain running to the dry well. The overflow pipe is to have a bend-trap.

CARPENTERS' WORK.

The frame is to be made and set up in a good and workmanlike manner, with good, sound, square-edged spruce timbers and joists of such sizes as are marked on the plans. The floor joists are to be bridged with truss bridging. The walls and roof to be boarded with sound pine boards, mill-planed and matched; to be well laid and nailed. The roofs are to be prepared for slating or tinning, as may be required. The outside finish is to be well wrought and put up according to the detail drawings, and is to be of sound, seasoned pine lumber, free from knots, sap or shakes. The walls of the house are to be clapboarded with Eastern pine clapboards, planed to an even thickness and moulded, and laid so as to lap not less than 1½", and all to be thoroughly nailed.

All projections, mitre-joints, and other exposed places are to be well leaded with sheet lead so as to prevent all leakage.

SLATING AND TINNING.

All the roofs are to be slated with good Pennsylvania slates of uniform color, laid on tarred sheathing paper, and secured with Swedes iron nails. The slates on the Mansard roofs are to be 8' x 12", with the lower ends rounded.

The roofs of the Bay and Luthern windows, and of the piazza, are to be tinned with the best quality of roofing tin, put on with soldered joints. The chimneys and all other places liable to leak are to be secured with lead or zinc and made perfectly tight.

The gutters to the main roof are to be of wood and formed as shown on the details of cornice, and to have lead eaves pipes, and two 3" (inside measurement) round wooden conductors put up where directed. The gutters for piazza and bay window are also to be of wood, with 2" wooden conductors. As many of the conductors are to connect with the cistern as may be directed. All others are to have proper turnouts at the bottom.

WINDOWS.

The window-frames are to be made according to the detail drawings, with Southern hard pine, pulley stiles and parting beads. The pockets for the weights are to be cut into the pulley stiles and secured with screws. The sashes are to be of pine 1½" thick, and double hung with weights, best hemp sash cord, and 1½" axle pulleys, and to be provided with good bronzed sash fastenings. The stop-beads are to be of soft pine, and are to be secured with round-headed blued iron screws.

The cellar windows are to have plank frames made in the usual manner, and the sashes to be hung so as to swing up under the first floor. The glass is to be of such sizes as are figured on the plans.

There are to be outside blinds on all the windows, to be hung with wrought-iron hinges and secured with good substantial fastenings.

PARTITIONS AND FURRINGS.

All partitions are to be set with 2" x 3" joists, placed 16" from centers and bridged. All are to be of even widths, and to be set straight and true. The cappings to the hall partitions are to be 3" x 4". All the partition joists, when practicable, are to go through the floor and stand on the partition cap below.

All ceilings are to be furred with 1" x 3" strips, placed 16" between centers, made straight, and all to be well nailed. All necessary grounds are to be put on to fully prepare for plastering. All other places requiring it are to be furred in a proper manner.

LATHING AND PLASTERING.

All the walls and ceilings throughout the house are to be lathed with good pine or spruce laths, assorted so as to be entirely free from knots, in all of the principal rooms. All are to be plastered with a heavy coat of lime and hair mortar evenly floated, and skim-coated with beach sand finish. All angles are to be made straight and true.

There are to be stucco cornices and centerpieces in the front hall, parlor, and sitting-room. The cornices to cost, on an average, 37 cents per foot, and the centerpieces to cost, in the aggregate, \$25.

INSIDE FINISH.

The inside finish is to be of clear and thoroughly kiln-dried pine lumber. The style of finish is to be as shown on detail drawings and put up in a thorough and workmanlike manner. There is to be a moulded base in all of the principal rooms throughout the house. All of the clothes closets are to have shelves and drawers as marked on the plans, and to have two strips on all sides where there are no drawers or shelves and provided with hooks screwed on not over 8" apart. The store room and china closet are to be finished with drawers and shelves. The sink is to be finished with a closet underneath. The under floors are to be of good, sound, seasoned

square-edged pine or spruce mill-planed boards, laid edge to edge. The upper floors are to be of narrow widths of seasoned pine, mill-planed, jointed, well laid and smoothed off. All floors are to be cut in between the bases.

The bath-tub, water-closet and wash-stand in the bath-room are to be finished with black walnut. The water-closet seat and the tub are to be paneled and moulded. The wash-bowl case is to be finished with drawers and a closet underneath. There is to be a paper box in the water-closet seat.

The front outside doors are to be double and of the sizes marked on the plan, to be 1 $\frac{1}{2}$ " thick and to have raised mouldings. The upper panels are to be of glass. The rear outside door is to be of such size as marked on the plan 1 $\frac{1}{2}$ " thick and moulded with raised mouldings. All other doors throughout the house are to be 1 $\frac{1}{2}$ " thick and moulded with raised mouldings. All doors are to be of such sizes as are figured on the plans and to have glass panels where marked.

All doors are to be of the best quality of kiln-dried pine lumber.

STAIRS.

The stairs are to be located and built as shown on the plans. They are to be finished with good clear pine lumber and to have a 7" (shaft measurement) chamfered newel post, 4" moulded rail and 1 $\frac{1}{2}$ " fancy turned balusters, all to be of thoroughly seasoned black walnut. The landing and gallery posts are to be 5" and chamfered.

The cellar stairs are to be built in a good and substantial manner.

Build and set up the steps to front and back doors with good, sound, seasoned 2" hard pine plank. The front steps to have a moulding under the treads with returned nosings.

HARDWARE.

All doors are to be hung with good loose-jointed butts of suitable sizes for their respective places, and to have brass bolt mortise locks with brass plate and keys, and all to have pressed glass knobs and bronzed trimmings. The front doors to be trimmed with flush bolts and to have a lock with night-latch and furnished with duplicate keys. The knobs on the outside to be silvered glass with silver-plated trimmings. The knob inside is to be of pressed glass.

The front door is to be provided with a bell hung in such place as may be directed. The pull is to be of silvered glass and to correspond with the front door knobs.

GAS PIPES.

Gas pipes are to be put into the ceiling of the parlor, sitting room, front hall and kitchen, and in all other rooms where marked on the plans.

PLUMBING.

There is to be a 2' x 4' cast-iron sink at the end of the pantry to be furnished with a 1 $\frac{1}{2}$ " waste-pipe, cesspool strainer, etc., to make the same complete.

There is to be a 3" copper pump at the sink to be provided with a 1 $\frac{1}{2}$ " bore, 2 $\frac{1}{2}$ lb. lead pipe to connect with the well.

There is to be a 2 $\frac{1}{2}$ " force pump of the best quality, provided with a two ways faucet and 1 $\frac{1}{2}$ " galvanized iron suction pipe connecting with the rain water cistern.

The rising main connecting with the cistern in the bath-room is to be 1 $\frac{1}{2}$ " in diameter, 2 $\frac{1}{2}$ lbs. per foot.

The bath-room is to be fitted up with bath-tub, water-closet and wash-bowl. The bath-tub is to be of the usual size, lined with planished copper and furnished with a $\frac{3}{4}$ " brass faucet, plug, chain, and rose overflow.

The water-closet is to be the best pan closet with wedgwood basin, strong lead trap and 4" iron soil pipe and is to be provided with all necessary pipes, service boxes, and other fixtures to make the same complete in every respect.

The wash-bowl is to be 15" of marbled pattern, to have a countersunk marble top 1" thick with moulded edge and to have 8" marble back and ends. The faucet, chain, holder and plug are

SPECIFICATIONS FOR DESIGN SHOWN ON PLATE TWO.

to be silver-plated: The wash-bowl case is to be lined up underneath with lead 4" high and to have a suitable sized waste pipe connecting with the soil pipe.

There is to be a cistern over the bath-room of 300 gallons capacity, lined with 5 lb. sheet lead and to be provided with all the necessary pipes, valves, etc., to make the same complete in every respect.

The supply pipe for the bath-tub is to be $\frac{3}{4}$ " bore, 2 $\frac{1}{2}$ lbs. per foot, for wash-bowl $\frac{1}{2}$ " bore, 1 $\frac{1}{2}$ lbs. per foot. The waste pipes for tub and bowl are to be 1 $\frac{1}{4}$ " bore 3 lbs. per foot. All materials of good quality necessary to complete the plumber's work in every respect are to be furnished and all the work is to be done in a good and workmanlike manner.

PAINTING AND GLAZING.

All of the woodwork outside and inside that is usually painted, is to have three good coats of paint of the best quality all to be tinted as may be directed. The closet floors are to be painted. All gutters and tinned roofs are to be painted with three good coats of paint. The blinds are to be painted four coats of such color as may be directed. The stair rails and all hard woodwork are to be filled and well rubbed down in oil. All hard pine work is to be puttied and well oiled.

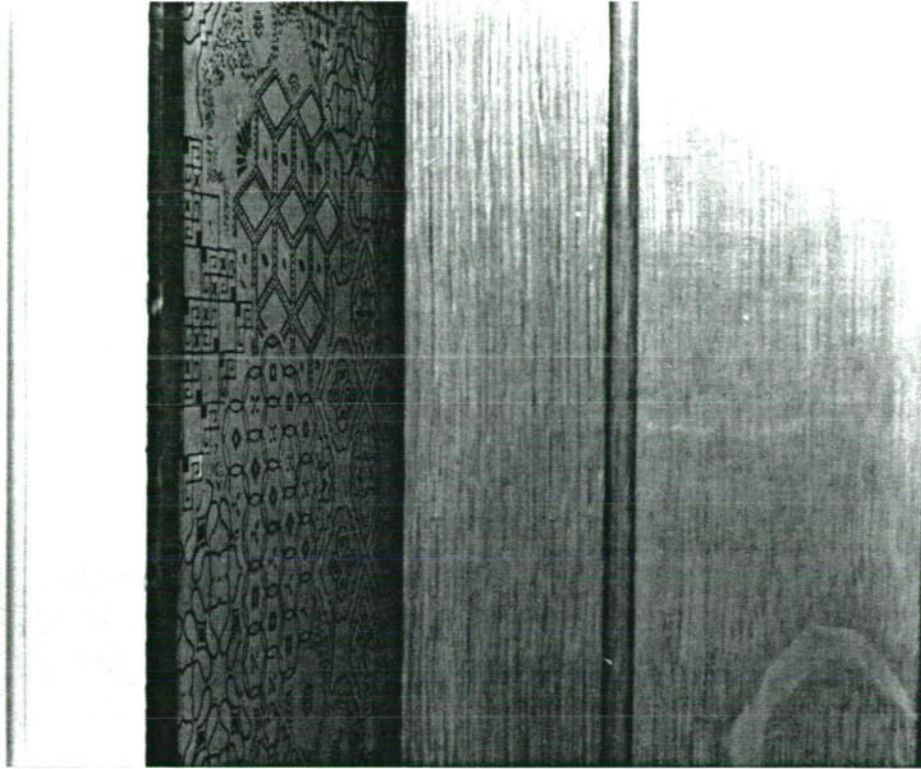
All of the sashes are to be glazed with the best German glass, all to be well bedded, bradded and back puttied. The front doors are to be glazed with ground glass of such pattern as may be selected. All other glass panel doors are to have plain ground glass.

FINALLY.

It is to be understood that everything necessary to the full and complete execution of the work according to the general intent and meaning of these plans and specifications is to be done and all materials furnished so as to complete the work in a good and workmanlike manner whether herein particularly described or not.

CONTEMPORARY PHOTOS (CP)

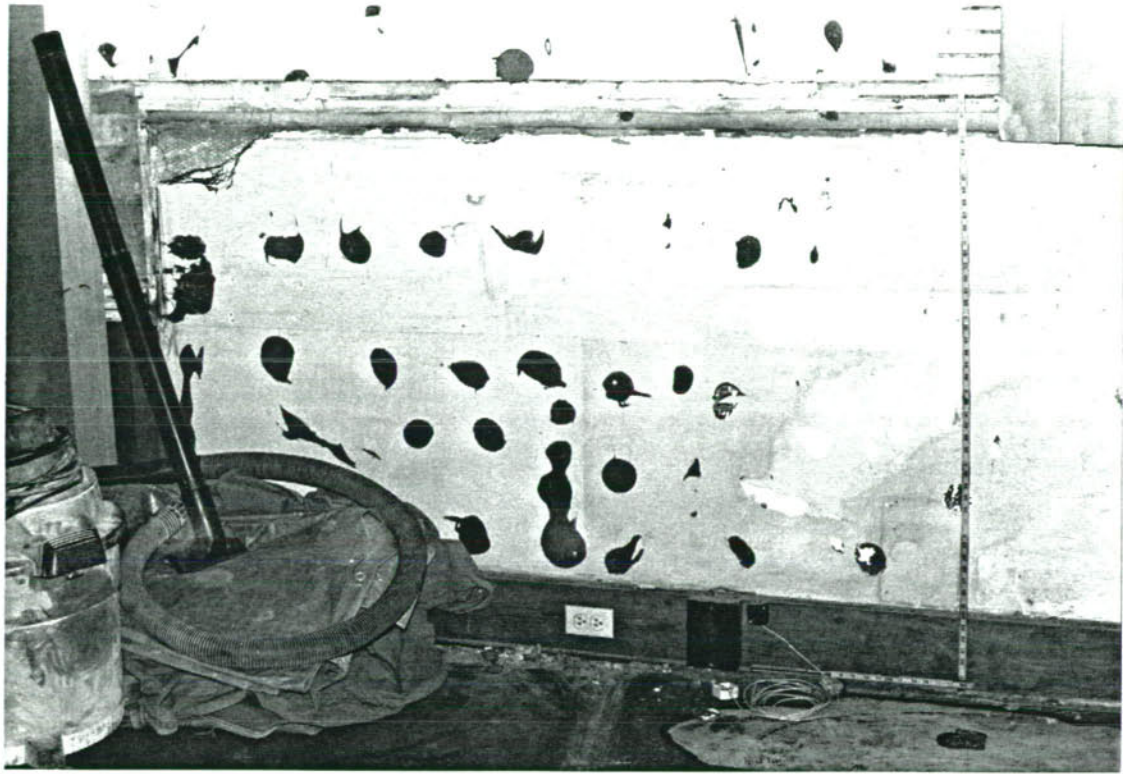
The numbering sequence for these photos follows the numbers from the Lawnfield Historic Structure Report. None of the photos in this section appeared in that report.



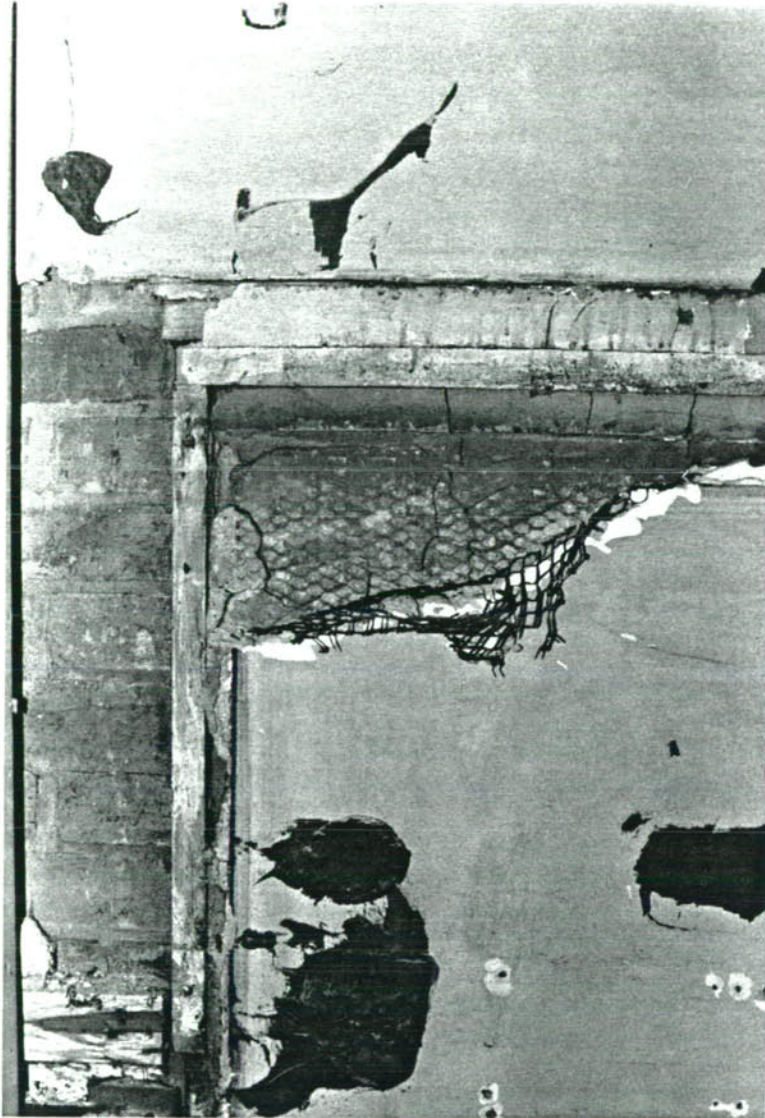
CP-107 Wallpaper in Door Pocket Between Room 106 and Room 110. This wallpaper must date from the 1880s remodeling and was covered during the installation of the sliding doors in 1885.



CP-108 Overall View of Room 116 Looking to South



CP-109 Former Ceramic Tile Area in Room 116



CP-110 Detail of Ceramic Tile Area Showing Ghost of Tiles



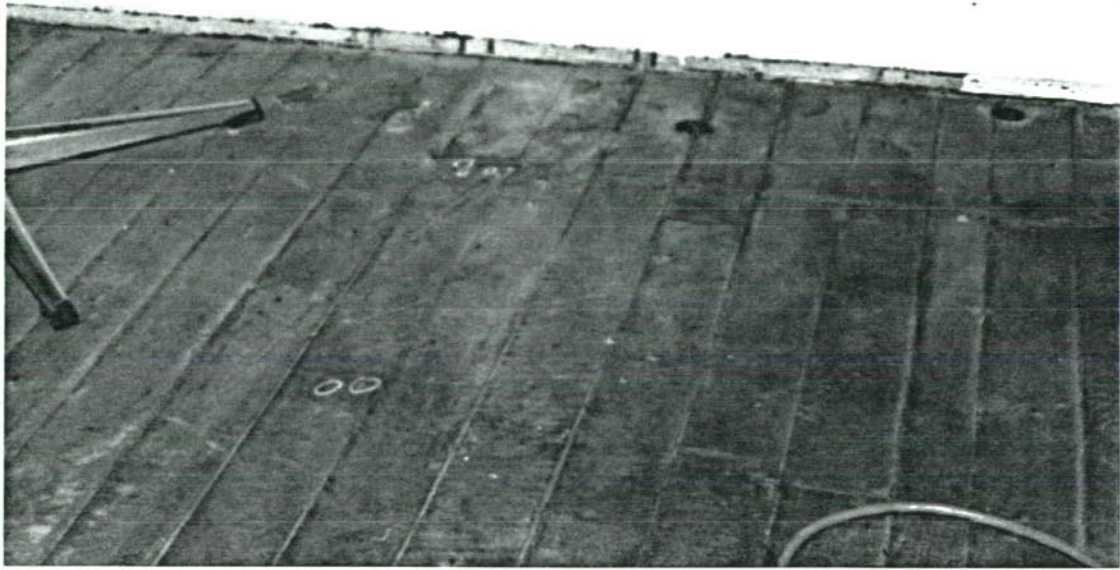
CP-111 Wainscot at Chimney in Room 116



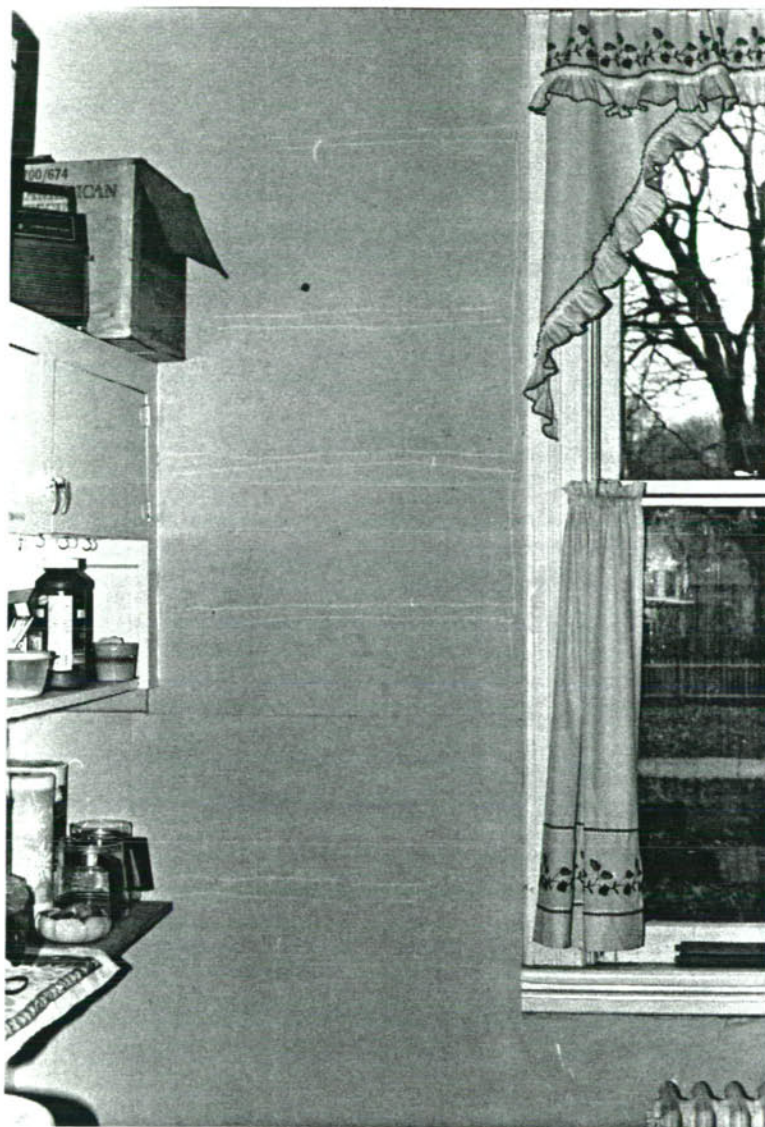
CP-112 Ghost of Servant Call Box in Room 116



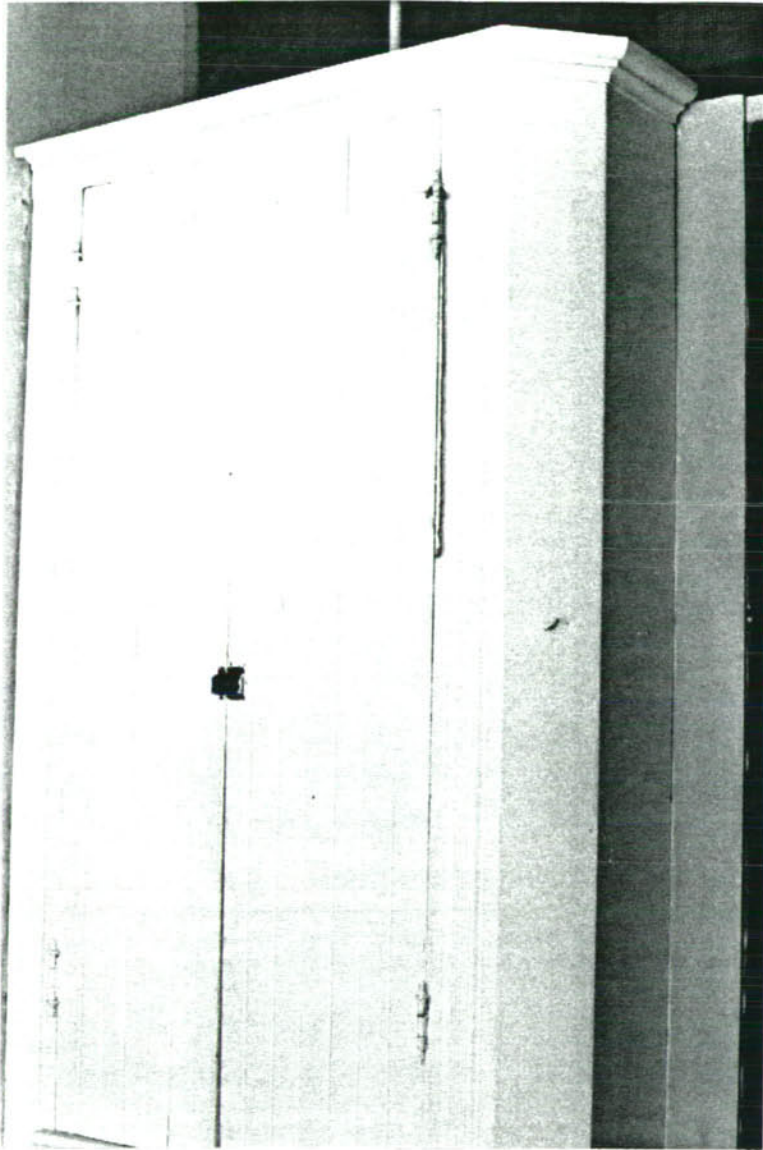
CP-113 Servant Call Box in Room 112



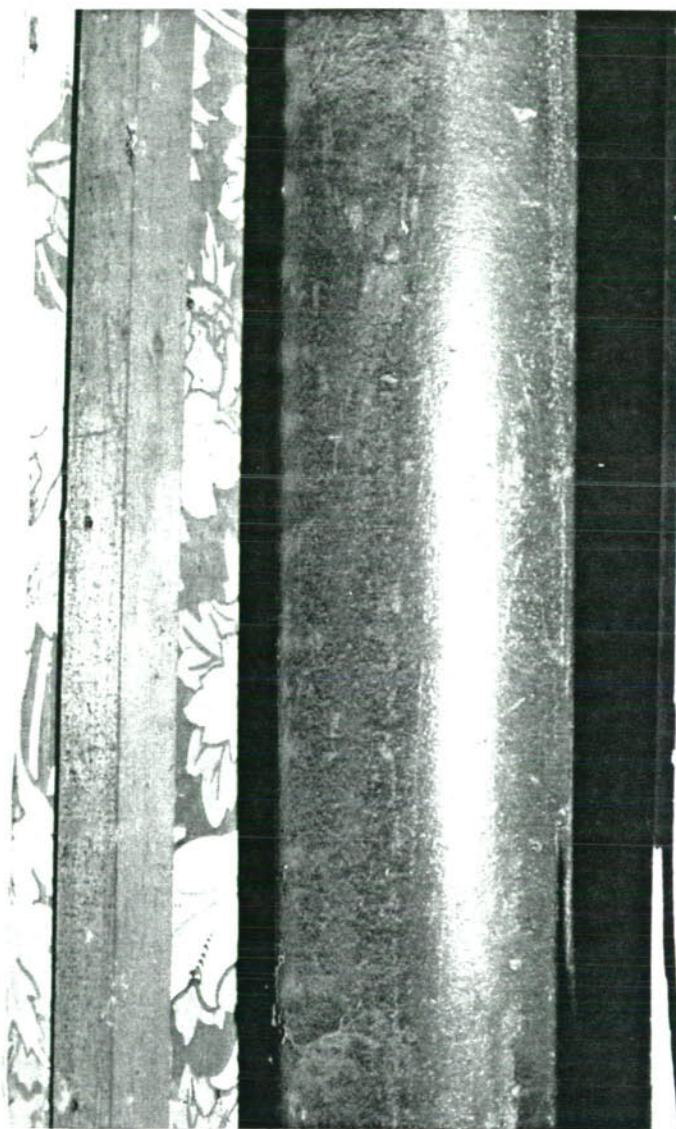
CP-114 Nail Holes Showing Former Partition Location in Room 117



CP-115 Ghost Showing Former Placement of Cabinet in Room 117



CP-116 Cabinet Formerly Located at Southwest Corner of Room 117. Note that the top moulding has been coped to fit the window casing.



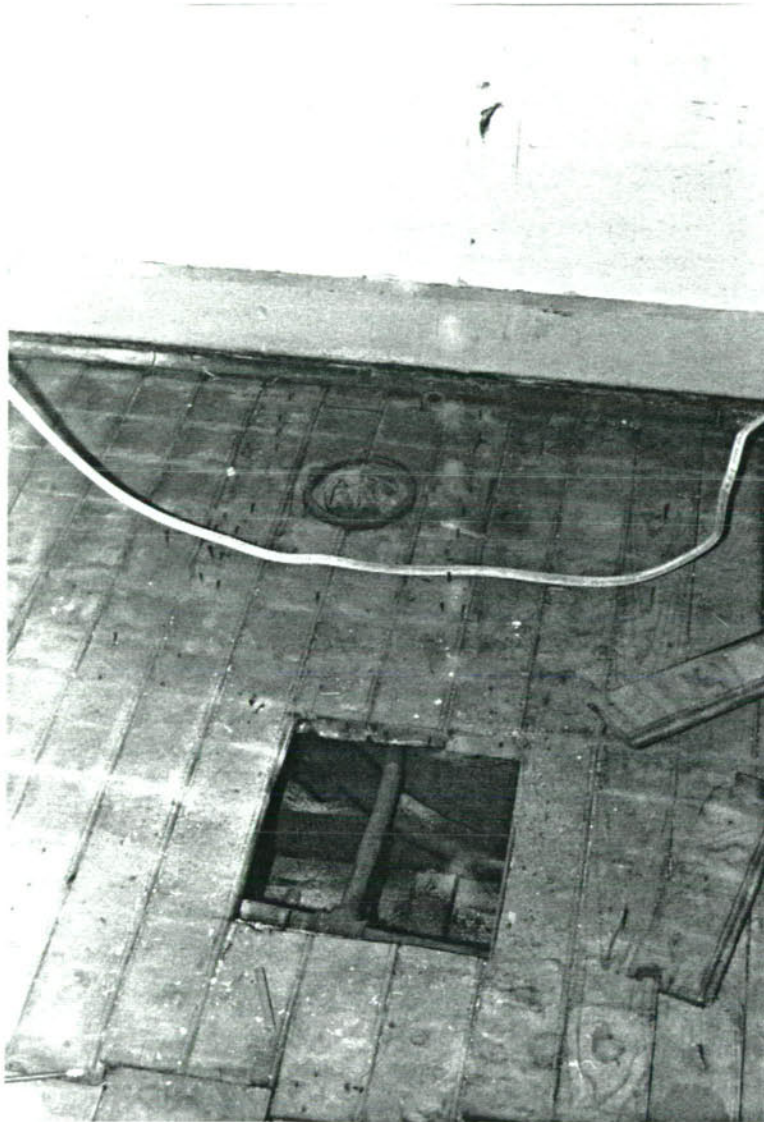
CP-117 Wallpaper at Plumbing Enclosure in Room 108. This paper probably dates from 1880 and was covered during the installation of plumbing ca. 1885.



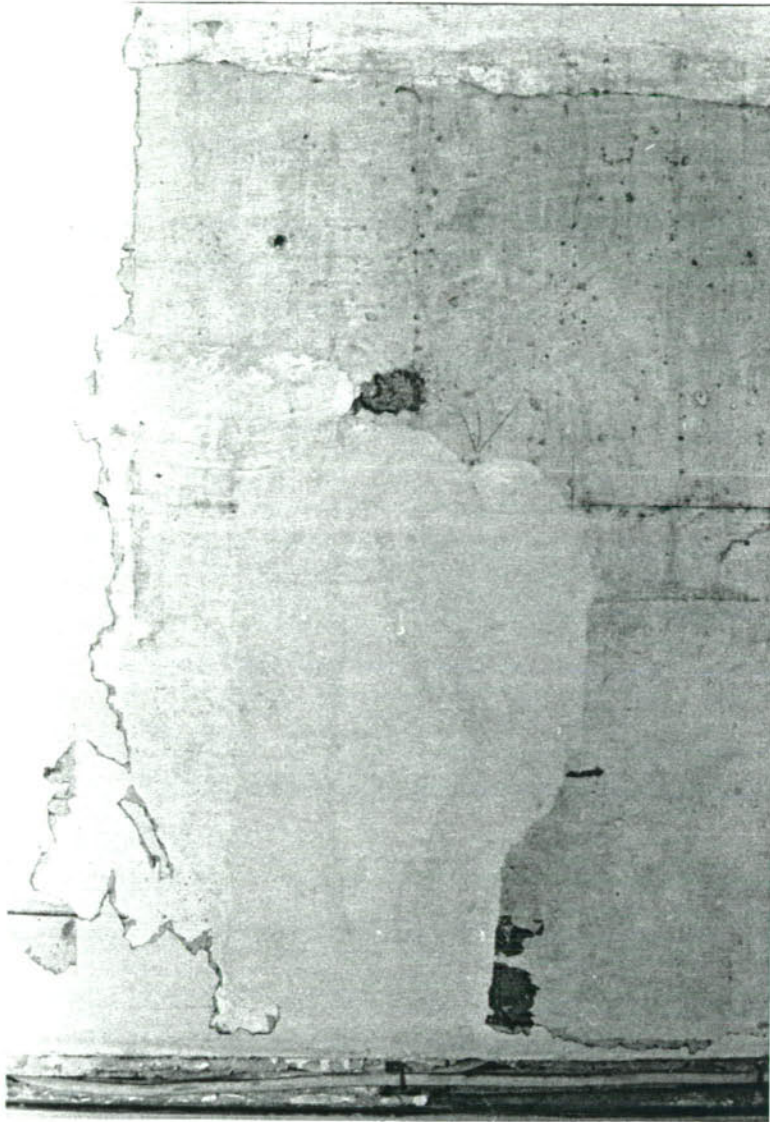
CP-118 Overall view of Room 214 Looking to East



CP-119 Holes Showing Placement of Tub and Sink in Room 214



CP-120 Holes Showing Placement of Water Closet in Room 214



CP-121 Plaster Repairs Showing Former Sink Placement in Room 214



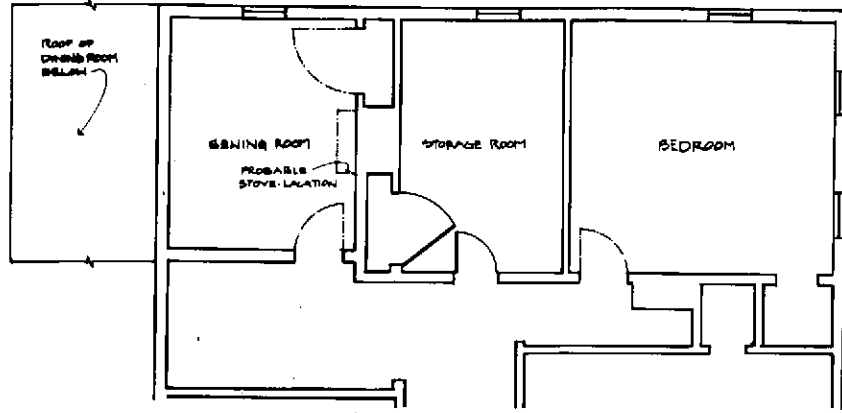
CP-122 Ghost Showing Former Water Closet Tank Location in Room 214



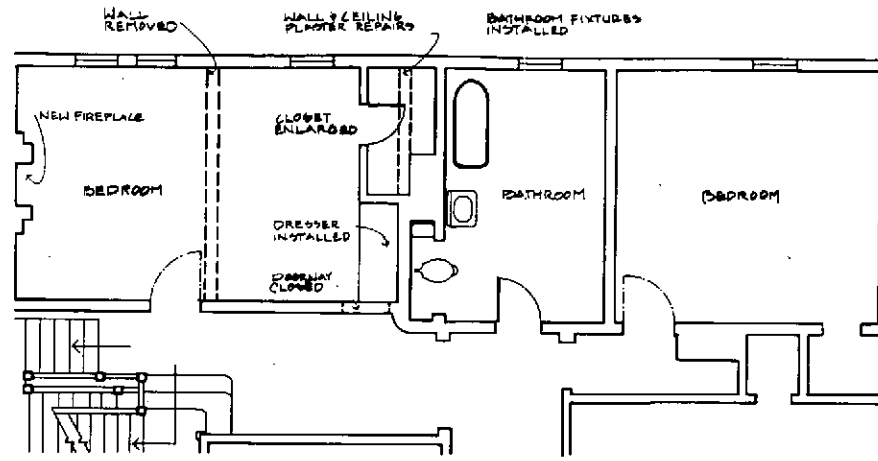
CP-123 Ghost Showing Lower Portion of Water Closet Tank. Note that the baseboard is finished, indicating that the enclosed area was created after the completion of the original work. Also note the light gauge pipe, the purpose for which is unknown.

BUILDING CHRONOLOGY (BC)

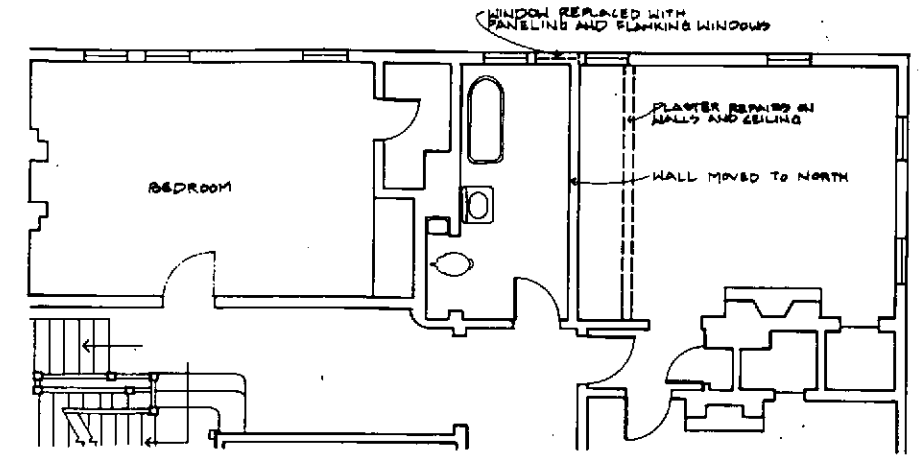
The following drawings follow the numbering sequence established in the Lawnfield Historic Structure Report.



1860

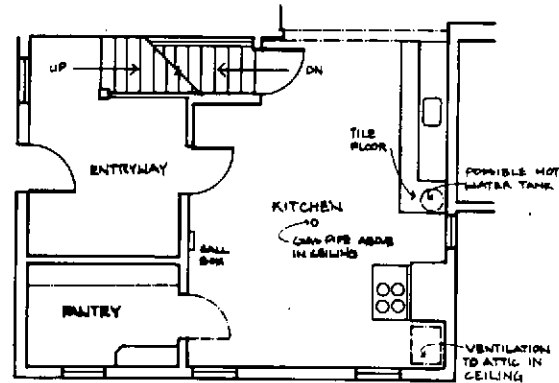


1885



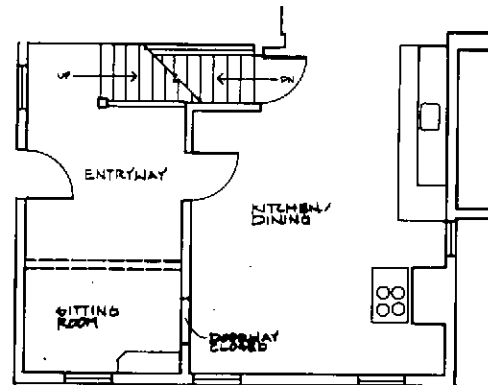
1903

BATHROOM EVOLUTION

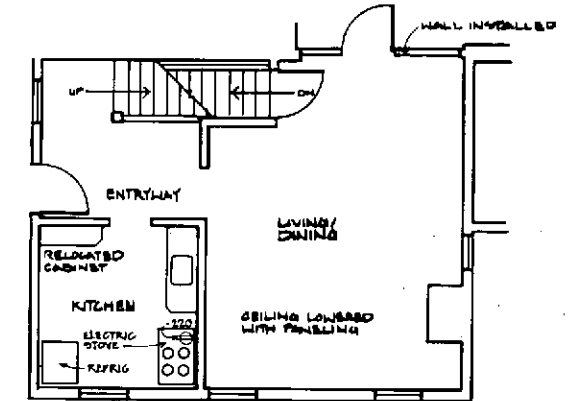


1885

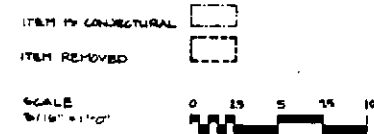
KITCHEN EVOLUTION



CA 1906



CA 1941



DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
DRAWN: RAG	BC	JAMES A. GARFIELD N.H.S.	
TECH. REVIEW:	5	BATHROOM EVOLUTION	PROJ. NO.
DATE: 29 JAN 91		KITCHEN EVOLUTION	SHEET
			OF

SOURCES CONSULTED

PRIMARY SOURCES

Manuscript Materials

Western Reserve Historical Society, Cleveland, Ohio
James A. Garfield Collection, Mss 3049
James A. Garfield Papers (microfilm; originals at Library of Congress)
James R. and Helen N. Garfield Collection, Mss 3314
Photography Files, James Abram Garfield
Photography Files, Lawnfield
Joseph Stanley-Brown Collection, Mss 3722
Mary (Garfield) Stanley-Brown Papers, Mss Vertical File S
Vertical File, Lawnfield, Mentor, Ohio

Lake County Historical Society, Mentor, Ohio

L. Bernice Garritt Scrapbooks
Harold J. Jonas Scrapbooks
Lawnfield File
Photography File, Lawnfield

Published Documents

The Diary of James A. Garfield. Brown, Harry J. and Williams, Frederick D., eds. 4 vols.
East Lansing: Michigan State University Press, 1967-81.

Newspapers

The Painesville Telegraph, March 29, 1877; August 9, 1877; September 13, 1877; July 11, 1878; March 20, 1879; July 10, 1879; January 1, 1880; March 4, 1880; April 15, 1880; June 10, 17, 24, 1880; July 22, 1880; October 14, 21, 1880; December 16, 1880; January 13, 1881; November 10, 1881; February 23, 1882; July 13, 1882; June 4, 18, 1885; July 15, 1885; September 10, 1885; October 8, 1885; December 14, 1892; January - December, 1893; March 24, 1904; February 24, 1938.

Telegraphic Painesville, July 24, 1965.

Pamphlets

Beamer, Arthur Orville. Lawnfield: Home of President J. A. Garfield. Mentor, Ohio: Western Reserve Historical Society, n.d.

Hurst, Horace B., Sr. The Garfield Home (Lawnfield). Mentor, Ohio: Lake County Chapter, Western Reserve Historical Society, 1958.

Wood, Frederick M., Sr. The Garfield Home (Lawnfield). Mentor, Ohio: Lake County Chapter, Western Reserve Historical Society, 1950.

SECONDARY SOURCES

Books

Arthur, Chester A. The Early Life and Public Career of James A. Garfield. Philadelphia: P. W. Ziegler & Co., 1880.

Balch, William R. The Life of James Abram Garfield. Philadelphia: Hubbard Bros., 1881.

_____. Life of President Garfield. Philadelphia: Hubbard Bros., 1888.

Bicknell's Village Builder. New York: A. J. Bicknell, 1878; reprint of the 5th ed. by Dover Publications, 1979.

Brisbin, James S. The Life and Public Career of General James A. Garfield. Philadelphia: Hubbard Bros., 1880.

Brown, E. E. The Life and Public Services of James A. Garfield. Boston: D. Lothrop and Co., 1881.

Bundy, J. M. The Life of Gen. James A. Garfield. New York: A. S. Barnes & Co., 1880.

Campen, Richard N. Architecture of the Western Reserve. Cleveland: Press of Case Western Reserve University, 1971.

Coffin, Charles C. The Life of James A. Garfield. Boston: James H. Earle, 1880.

Conwell, Russell H. The Life, Speeches, and Public Service of James A. Garfield. Boston: B. B. Russell, 1881.

Green, F. M. A Royal Life, or The Eventful History of James A. Garfield. Chicago and Cincinnati: Central Book Concern, 1882.

Hinsdale, B. A. The Republican Text-Book for the Campaign of 1880. New York: D. Appleton & Co., 1880.

Hosterman, A. D. Life and Times of James Abram Garfield. Springfield, Ohio: Farm and Fireside Pub. Co., 1882.

Howe, Henry. Historical Collections of Ohio. State of Ohio, 1888, 1902.

Johannesen, Eric. Cleveland Architecture, 1876-1976. Cleveland: Western Reserve Historical Society, 1979.

Lossing, Benson J. A Biography of James A. Garfield. New York: Henry S. Goodspeed & Co., 1882.

McCabe, James D. The Life and Public Services of Gen. James A. Garfield. Philadelphia: National Publishing Co., 1881.

Palliser's American Cottage Homes. New York: Palliser, Palliser & Co., 1878; reprint by The American Life Foundation, 1978.

Riddle, A. G. The Life, Character and Public Services of Jas. A. Garfield. Cleveland: W. W. Williams, 1881.

Ridpath, John C. The Life and Work of James A. Garfield. Cincinnati: Jones Bros. and Co., 1882.

Thayer, William M. From Log-Cabin to White House: The Story of President Garfield's Life. 5th ed. London: Hodder and Stoughton, 1881.

Articles

Cardinal, Eric J. "Lawnfield: The Evolution of a House." Lake County Historical Quarterly 23 (December 1981): 1-6.

Comer, Lucretia G. "Lawnfield." Quarterly Review of the Michigan Alumnus 57 (Spring 1951): 258-61.

_____. "Lawnfield, Chapter II, 1881-86." Quarterly Review 58 (Summer 1952): 338-343.

Reports

Johnson, Ronald. Historic Resource Study: James A. Garfield Site. 1984.

Newman, Paul. Historic Structure Report: James A. Garfield Site. 1989.

Yocum, Barbara. Interior Finishes Analysis: Lawnfield Main House. 1989.

Yocum, Barbara Pearson. Paint and Mortar Analysis: James A. Garfield National Historic Site. 1987.

PERSONAL CONTACTS

Lake County Historical Society: Carl Engel

Lawnfield: James Regan

National Park Service (Denver): Ronald Johnson, Paul Newman

van Dijk, Pace, Westlake + Partners: Richard Bauschard, Stephen Solema

Western Reserve Historical Society: Siegfried Buerling, John Cribowski, Kermit Pike

ENDNOTES

1. James A. Garfield, The Diary of James A. Garfield, eds. Harry J. Brown and Frederick D. Williams, 4 vols., (East Lansing, Michigan: Michigan State University Press, 1967-81), 3:473.
2. Lucretia G. Comer, "Lawnfield," The Quarterly Review of the Michigan Alumnus 57 (Spring 1951): 258.
3. Paul Newman, Lawnfield Historic Structure Report: James A. Garfield National Historic Site, (National Park Service, Denver Service Center, Denver, Colorado, 1990), p. 17.
4. Garfield, The Diary of James A. Garfield, 4:227.
5. Painesville Telegraph, 10 July 1879.
6. James A. Garfield (JAG), to Lucretia R. Garfield (LRG), 13 August 1879, The James A. Garfield Papers, Western Reserve Historical Society, Cleveland, Ohio, Microfilm Version, Series 3, Reel 8.
7. JAG to LRG, 14 August 1879, The James A. Garfield Papers, Series 3, Reel 8.
8. JAG to LRG, 2 September 1879, The James A. Garfield Papers, Series 3, Reel 8.
9. JAG to LRG, 4 September 1879, The James A. Garfield Papers, Series 3, Reel 8.
10. LRG to JAG, 22 September 1879, The James A. Garfield Papers, Series 3, Reel 8.
11. JAG to B.A. Hinsdale, president of Hiram College and a friend of the Garfield family, James A. Garfield Collection, Western Reserve Historical Society, Manuscript 3049, Container 3, File 8.
12. Garfield, The Diary of James A. Garfield, 4:373.
13. Ibid.
14. Painesville Telegraph, 4 March 1880.
15. Dr. John P. Robison to JAG, 16 March 1880, The James A. Garfield Papers, Series 4, Reel 51.
16. Statement dated 30 April 30 1880, The James A. Garfield Papers, Series 14, Reel 140.
17. The James A. Garfield Papers, Series 14, Reel 140.
18. B.A. Hinsdale to LRG, 7 April 1880, expressing his concern about her maintaining her unpretentious image, The James A. Garfield Collection, Container 2, File 2.
19. Garfield, The Diary of James A. Garfield, 4:396.
20. Ibid.

21. Statement dated 26 April 1880, The James A. Garfield Papers, Series 14, Reel 140.
22. The James A. Garfield Papers, Series 14, Reel 140.
23. JAG to B.A. Hinsdale, 15 April 1880, The James A. Garfield Collection, Container 3, File 8.
24. Painesville Telegraph, 15 April 1880.
25. Robison to JAG, 19 April 1880, The James A. Garfield Papers, Series 4, Reel 52.
26. Robison to JAG, 20 April 1880, The James A. Garfield Papers, Series 4, Reel 51.
27. Robison to JAG, 30 April 1880, The James A. Garfield Papers, Series 4, Reel 52.
28. Garfield, The Diary of James A. Garfield, 4:410.
29. Robison to JAG, 3 May 1880, The James A. Garfield Papers, Series 4, Reel 52.
30. Robison to JAG, 6 May 1880, The James A. Garfield Papers, Series 4, Reel 52.
31. Robison to JAG, 7 May 1880, The James A. Garfield Papers, Series 4, Reel 52.
32. The James A. Garfield Papers, Series 14, Reel 140.
33. LRG to JAG, 19 May 1880, The James A. Garfield Papers, Series 3, Reel 8.
34. LRG to JAG, 21 May 1880, The James A. Garfield Papers, Series 3, Reel 8.
35. JAG to LRG, 21 May 1880, The James A. Garfield Papers, Series 3, Reel 8.
36. The James A. Garfield Papers, Series 14, Reel 140.
37. Garfield, The Diary of James A. Garfield, 4:423.
38. Ibid., 4:424.
39. JAG to LRG, 29 May 1880, The James A. Garfield Papers, Series 3, Reel 8.
40. LRG to JAG, 30 May 1880, The James A. Garfield Papers, Series 3, Reel 8.
41. The James A. Garfield Papers, Series 14, Reel 140.
42. Ibid.
43. LRG to JAG, 1 June 1880, The James A. Garfield Papers, Series 3, Reel 8.
44. LRG to JAG, 4 June 1880, The James A. Garfield Papers, Series 3, Reel 8.
45. The James A. Garfield Papers, Series 14, Reel 140.

46. Ibid.
47. Garfield, The Diary of James A. Garfield, 4:457.
48. Ibid.
49. Ibid., 4:489.
50. Ibid., 4:503.
51. Ibid., 4:510.
52. Series 14, Reel 140.
53. James S. Brisbin, The Life and Public Career of Gen. James A. Garfield (Philadelphia: Hubbard Brothers, 1880), p. 316.
54. Ibid., pp. 316-319".
55. Lucretia G. Comer, "Lawnfield," The Quarterly Review of the Michigan Alumnus 57 (Spring 1951): 260.
56. Paul Newman, Lawnfield Historic Structure Report: James A. Garfield National Historic Site, (National Park Service, Denver Service Center, Denver, Colorado, 1990) p. 43.
57. Ibid., p. 77.
58. Ibid., p. 77.
59. Ibid., p. 78.
60. Ibid., p. 81.
61. Ibid., pp. 84-85.
62. Ibid., p. 82.
63. Ibid., p. 48.
64. Painesville Telegraph, 10 November 1881.
65. Ronald W. Johnson, Historic Resource Study: James A. Garfield National Historic Site, (National Park Service, Denver Service Center, Denver, Colorado, 1984), p. 122.
66. From "Diary of Harry Garfield," typescript page copied by "L.G.C.", Lawnfield File, Lake County Historical Society, Mentor, Ohio.
67. Johnson, Historic Resource Study, pp. 122-23, footnote 28.

68. Ibid., pp. 122-23, footnotes 28 and 29.
69. Painesville Telegraph, 4 June 1885.
70. Ibid., 16 July 1885.
71. Ibid., 10 September 1885.
72. Ibid., 8 October 1885.
73. Johnson, Historic Resource Study, p. 127, footnote 43.
74. Abram Garfield to A.O. Beamer, February 27, 1942, Lawnfield File.
75. Johnson, Historic Resource Study, pp. 127-28.
76. Ibid., p. 132, footnote 54.
77. Lucretia G. Comer, "Lawnfield, Chapter II, 1881-86," The Quarterly Review of the Michigan Alumnus 58 (Summer 1952): 342.
78. Eric J. Cardinal, "Lawnfield: The Evolution of a House," Lake County Historical Quarterly 23 (December 1981): 4.
79. Ibid., p. 5.
80. Comer, "Lawnfield, Chapter II, 1881-86," p. 342.
81. "Reminiscences" of J. Stanley-Brown, ca. 1930, typescript, Joseph Stanley-Brown Collection, Western Reserve Historical Society, Manuscript 3722, File 2, p. 24.
82. Newman, Lawnfield Historic Structure Report, p. 43.
83. Ibid., p. 59.
84. Ibid., p. 79.
85. Ibid., p. 80.
86. Ibid., p. 82.
87. Ibid., p. 85.
88. Johnson, Historic Resource Study, p. 131, footnote 53.
89. Abram Garfield to A.O. Beamer, February 27, 1942, Lawnfield File.
90. Johnson, Historic Resource Study, Base Map 3, "1885 James A. Garfield Farm".

91. Henry Howe, Historical Collections of Ohio, ed. 1902 (State of Ohio, eds. 1888, 1902), pp. 50-51.
92. Painesville Telegraph, 14 December 1892.
93. Johnson, Historic Resource Study, p. 137, footnote 66.
94. *Ibid.*, p. 137, footnote 67.
95. Painesville Telegraph, 24 March 1904.
96. Newman, Lawnfield Historic Structure Report, p. 51.
97. *Ibid.*, p. 20.
98. Johnson, Historic Resource Study, p. 152, footnote 10.
99. *Ibid.*, p. 169, footnote 18.
100. Newman, Lawnfield Historic Structure Report, p. 23.
101. *Ibid.*, pp. 21-22, endnote 11.
102. *Ibid.*, p. 9.
103. *Ibid.*, p. 44.
104. Johnson, Historic Resource Study, p. 165.
105. Newman, Lawnfield Historic Structure Report, p. 24, endnote 22.
106. Lawnfield File.
107. Newman, Lawnfield Historic Structure Report, p. 23, endnote 21.
108. *Ibid.*, p. 24, endnote 26.
109. Johnson, Historic Resource Study, p. 179, footnote 41.
110. Arthur Orville Beamer, Lawnfield: Home of President J.A. Garfield, (Mentor: Western Reserve Historical Society, n.d.), p. 12, in Lawnfield File.
111. Newman, Lawnfield Historic Structure Report, p. 27.
112. Undated, Lawnfield File.
113. Typescript memo, no author, Lawnfield File.
114. Johnson, Historic Resource Study, p. 170, footnote 20.

115. Ibid., pp. 170-71, footnotes 21 and 22.
116. Newman, Lawnfield Historic Structure Report, p. 27, endnote 41.
117. Ibid., p. 27, endnote 42, "The Union Sand and Supply Corporation to The Garfield Home Committee, June 27, 1941, July 8, 1941, in Lawnfield File.
118. In Lawnfield File.
119. Johnson, Historic Resource Study, p. 171, footnote 23: "The Delaware (Ohio) Gazette, March 20, 1942. Painesville Telegraph, October 21, 1943."
120. Lawnfield File.
121. Newman, Lawnfield Historic Structure Report, p. 29, endnote 52, "Air-Way Insulation Company to WRHS (Invoice A-346), January 18, 1944, in Lawnfield File."
122. Ibid., p. 397.
123. Ibid., pp. 27-28, endnote 43.
124. Ibid., p. 28, endnote 45.
125. Ibid., pp. 27-28.
126. Ibid., p. 30, endnote 60.
127. Frederick M. Wood, Sr., The Garfield Home (Lawnfield) (Mentor: Lake County Chapter, Western Reserve Historical Society, 1950) p. 10, in Lawnfield File.
128. "A Guide to President James A. Garfield and his Home," mimeographed typescript, n.a., n.d., in Lawnfield File.
129. Newman, Lawnfield Historic Structure Report, p. 32, endnote 70.
130. Johnson, Historic Resource Study, p. 183.
131. Newman, Lawnfield Historic Structure Report, p. 32, endnote 71, "Lake County Chapter, 'Financial Report of Garfield Home Fund From April 1, 1952-March 31, 1953.'"
132. Ibid., p. 32, endnote 73.
133. Horace B. Hurst, Sr., The Garfield Home (Lawnfield), (Mentor: Lake County Chapter, Western Reserve Historical Society, 1958, 4th edition), in Lawnfield File.
134. Lawnfield Files, LCHS.
135. Newman, Lawnfield Historic Structure Report, p. 32, endnote 75.

136. Telegraphic Painesville, 24 July 1965.
137. Newman, Lawnfield Historic Structure Report, p. 33, endnote 82.
138. Johnson, Historic Resource Study, p. 122-23.
139. *Ibid.*, p. 127.
140. Newman, Lawnfield Historic Structure Report, p. 79.
141. *Ibid.*, pp. 21-22.
142. Howe, Historical Collections.

