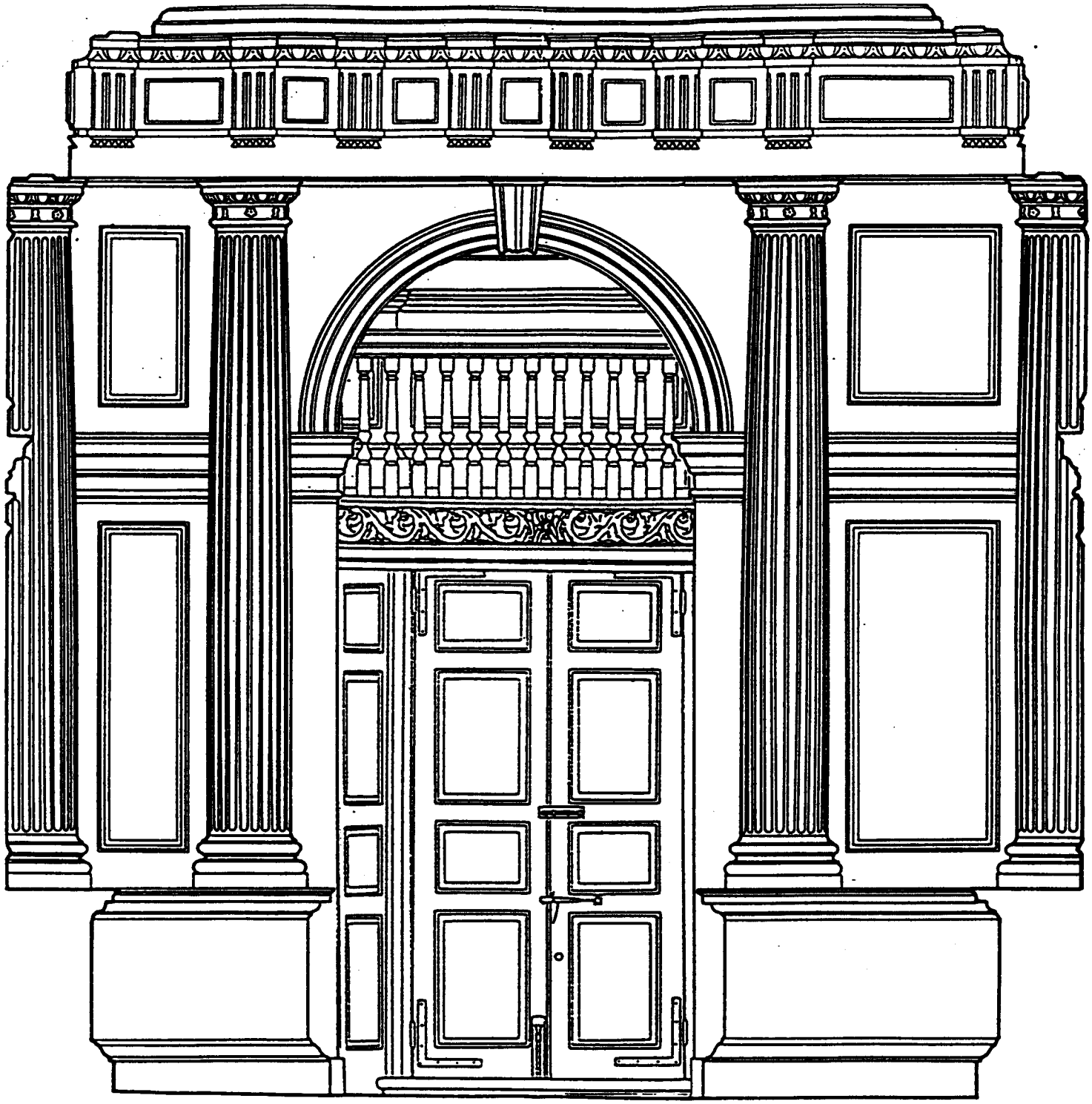


INDEPENDENCE HALL
HISTORIC STRUCTURES REPORT
ARCHITECTURAL DATA SECTION

THE CENTRAL HALL & TOWER STAIRHALL

Penelope Hartshorne Batcheler

March 1989

D-101

INDEPENDENCE HALL

HISTORIC STRUCTURES REPORT

ARCHITECTURAL DATA SECTION

PART II PORTION

THE CENTRAL HALL AND TOWER STAIRHALL

by

Penelope Hartshorne Batcheler

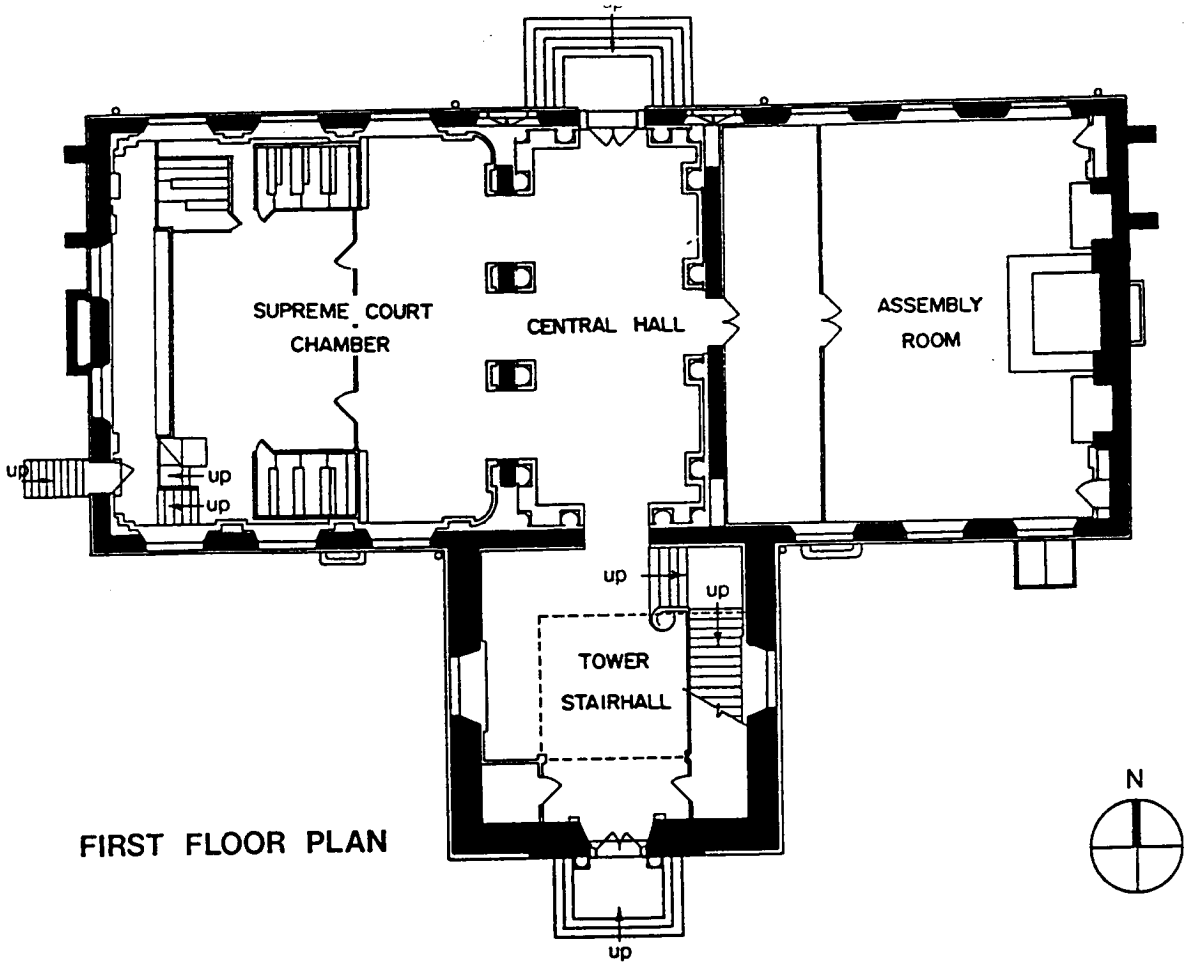
Historical Architect

Independence National Historical Park

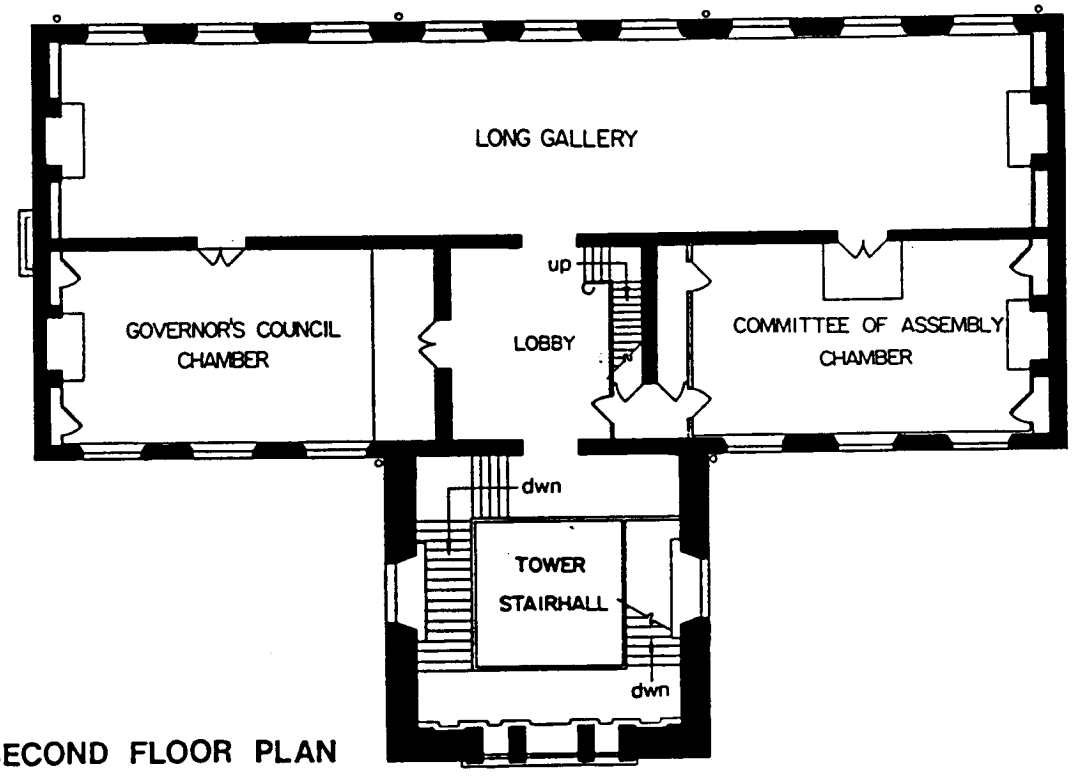
1989

ON MICROFILM

PLEASE RETURN TO:
TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE



FIRST FLOOR PLAN



SECOND FLOOR PLAN

INDEPENDENCE HALL 1976.

Scale: 0 5 10 15 20 25 30 feet

TABLE OF CONTENTS

Cover

The cover illustration of the Central Hall south wall looking through to the Tower Stairhall is from the 1987 stereophotogrammetric drawings of Independence Hall made for the Historic American Buildings Survey.

Preface 3

Acknowledgements 7

Building the Pennsylvania State House..... 8

Description of the Process... 8
Development Chronology.....10

The Division of Responsibilities in Designing and Building the Pennsylvania State House 15

Brief Chronology: Central Hall, Tower Stairhall..... 22

Central Hall, Pre-1750s..... 23

Unfinished Space...23 Asymmetrical Floor Plan...23 Brick Floor...24 Early Stairway...24 Assembly Room Doorway...25 North and South Entrances...25 Supreme Court Room Archways...26 Lighting the Space...26 Blind Windows...26 No Plasterwork...27

1750s Completion of the State House..... 29

Architectural Description of the 1750s Central Hall and Tower Stairhall..... 31

Central Hall...31 Tower Stairhall...32 Derivation of Architectural Orders Used...34 Architectural Pattern Books Used...35 Design Process...39 Detail Variations...40

Installation of the Central Hall Woodwork and Construction of the Tower Stairhall..... 43

Edmund Woolley's Master Carpenter Bill...43
Samuel Harding's Carving Bill...44
Construction Sequence...46 Construction Methods...47
Samuel Harding's Craftsmanship...50

Alterations Made Over the Years in the Central Hall and Tower Stairhall..... 53

Eighteenth Century Alterations...53
Nineteenth Century Alterations...54
Charles Willson Peale's "Lodge"...54
County Commissioners 1816: North Entrance...55, Plaster Ceiling...56, Open-top Scrolled Pediment...56
William Strickland 1828 Clock Weight Boxes...57
City Council Renovations 1854: Stair to Tower...57 Flagstone Floor...58
Centennial Changes 1876: Paint Removal...58 Tabernacle Frame Copies...59 Lighting...59 Crowd Control...60 Centennial Bell...60 South Doors...62
T. Mellon Rogers Restorations 1896-8...62
Early Twentieth Century Alterations...64
Lighting...64 South Door Glass Panels...65

National Park Service Restorations 1950s-60s..... 66

Stair Slip-in Treads...66 Stair Structural Reinforcement...66 Original Wood Flooring...66
First Floor Levels and Original Brick Flooring...67
Paint Colors...68 Woodwork Repairs...69
Artifacts Found...70 Architectural Elements Removed and Catalogued...70 The Guard Room...71 Lighting ...71
Glass...72 Wear and Tear...72 Photogrammetry...75

Author's Recommendations for Further Architectural Research..... 76

Endnotes..... 78

Illustrations..... 97

Appendix A: Eighteenth Century Delaware Valley Architectural Drawings, their Types and Survival..... 186

Appendix B: List of Artifacts from the Central Hall and Tower Stairhall..... 195

PREFACE

The Central Hall and Tower Stairhall of Independence Hall (or the Pennsylvania State House, as it was first known) are, in this writer's opinion, two of the grandest interior spaces built in the thirteen colonies. One never ceases to be impressed by the stature of the Central Hall's engaged columns flanking the graceful archways. The large Palladian window and the great height of the Tower Stairhall ceiling seem extraordinary for the period.

That these two spaces remain more unchanged than most of the rest of the building is truly fortunate and may have come about by the merit of their architectural quality, and the continuous need for their function.

This report will describe the architecture of these spaces, give their known physical history from 1733 to the twentieth century, and recommend what further research could add to our knowledge. As an introduction, one chapter will describe the complexity in building such a large structure of that time, and another chapter will give the writer's opinion in the controversy over who designed the building, who did the working drawings and who superintended the construction.

Many reports have been written about Independence Hall. In 1962 the staff historians of Independence National Historical Park wrote a major historical report based on available documentary sources.[1] The historical architects, charged with restoring areas of the building before the 1976

Bicentennial celebration, produced a number of architectural reports based on historical documentation and the physical evidence of those specific areas.

The pre-1976 architectural reports address the following areas of Independence Hall: the exterior steps, the entrances, the hallway flooring, the guard's room, the eighteenth century appearance of the Assembly Room, the Supreme Court Room's surviving original paneling and its west wall original appearance, the painting of the hallways, and the roofing. The eighteenth century appearance of the Supreme Court Room fixtures has been documented in an INHP Museum Division furnishings report. Other areas of the building have been researched and restored but have not been addressed in formal reports. Fortunately, the chief architects, Charles S. Grossman, Charles E. Peterson, and Lee H. Nelson, saw to it that evidence was recorded in logs, restoration rationales were noted, and memos were written to the files about the restoration process.[2]

The National Park Service intends that reports be written on all the portions of Independence Hall which have not yet been formally presented. These reports, in addition to this one on the Central Hall and Tower Stairhall, should address the second floor; the appearance of the Assembly Room in its various stages after the original paneling was removed; the cellars and wing buildings; the exterior (including the tall case clock and the 1828 William Strickland steeple); and the paint colors within and without the entire building.

These reports are intended to help future generations who

must care for and interpret the building, and who will continue the study of its fabric. The reports must be well documented, referring to the raw data needed for a fuller understanding.[3]

The National Park Service restoration was the fifth attempt to restore portions of the building. We had the great advantages of time, money, interdisciplinary teamwork and an FBI-Sherlock Holmes approach.

Some of the research approaches developed by the NPS architects working on Independence Hall have become commonplace in the practice of restoration work. One such approach is the study of paint layer sequences to determine color usage in a building and thus detect aspects of its physical history. The comparison of mortar content with other dateable mortars to date various masonry work in a building and the development of historically accurate pointing mortar, were restoration practices nurtured on the Independence Hall project. And most importantly, Lee H. Nelson's study (1961-1968) of the chronology of nail manufacture was developed at Independence Hall and has contributed enormously to the field of historic building research.

Since the 1960s restoration of Independence Hall, non-destructive research techniques such as the X ray have been developed by others. Hopefully, even more sophisticated diagnostic techniques will become available, and new documentary data may be uncovered. With these possibilities Independence Hall's restoration can only be improved upon over time.

It has been an enormous privilege to work on this great old building, and to have done so as part of the dedicated National Park Service team of architects, historians, curators and archeologists.

ACKNOWLEDGEMENTS

I wish to acknowledge Independence National Historical Park Superintendent Hobart G. Cawood, Assistant Superintendent Bernard Goodman, and Mid-Atlantic Region Chief Historical Architect Henry J. Magaziner, who helped to create the position of Historical Architect at the Park with the responsibility to complete the unfinished Historic Structures Reports on Independence Hall. That they also have prodded the writer on has been greatly appreciated.

Historical Architect William D. Brookover, Historian Anna Coxe Toogood, intern Shirley Wajda, and my husband George D. Batcheler, Jr. have seen to it that the Report is of interest to and comprehensible by architects and non-architects alike. And many thanks go to Theresa Hyett for typing this report. But it is Lee H. Nelson, Chief of the National Park Service Technical Services Branch in Washington, D.C., to whom I owe the greatest thanks for reviewing the content and pointing out where further development was needed.

BUILDING THE PENNSYLVANIA STATE HOUSE

Building the State House took about twenty-three years. This is strange to a generation that has witnessed the construction of multistoried skyscrapers in the course of a year or two. Hand labor was time consuming and the slow delivery of materials and the scarcity of certain craftsmen (such as plasterers) prolonged the process. Add to this the factor of sporadic funding and one can see how the project dragged on. (See Historic Structures Report Part II (1968), Chapter II. In this report INHP staff historians skillfully unraveled the story of the administration and financing of the project.)

If we could picture the 1733 initial stage of construction, that is of the main building, we would most likely see two enormous excavations being lined with rough stone foundation walls.[1] One cellar was to be located under the forty-foot-square room to be used by the legislature--the Assembly Room--and the other cellar was to be under the forty-foot-square room for the Supreme Court of the Province of Pennsylvania. The twenty-by-forty-foot area between these two cellars was unexcavated; above was the brick-floored entrance hall with a stairway (later replaced) leading to the second floor.[2]

Stacks of bricks, sorted by color and hardness, would also be part of this scene, set near the masons who soon would start laying up the 24-inch-thick base of the building's exterior walls. In the yard, behind the building excavation,

carpenters would be hewing, laying out, and joining the timbers of the floor framing. The 11-inch-square girders with 2-by-11-inch joists were joined with tenons (tongues) cut to fit designated mortises (holes). When the framing members were all assembled on the ground they were systematically marked with Roman numerals for reassembly in the building. The thirty-foot-long girders were probably lifted into place by a derrick and block and tackle, powered by horses, or possibly a ship's capstan turned by men.

It was a puzzle to bring all these pieces together in the building. Picture the walls completed up to the first floor ceiling level, the masons leaving pockets for the second floor joists and girder ends to be dropped into place. Temporary shoring supported the other ends of the framing members while they were all joined together in an intricate hand-in-hand system.[3]

The types of activities needing supervision at such a building site included "staking out" (locating) the building wall lines, digging the cellars and the disposal of the clean dirt; delivery of proper foundation stones; delivery of unslacked lime; slacking of this lime in water filled pits until its chemical reaction induced the mix to boil; correctly mixing the cooled slacked lime with sand and water to make up the day's supply of mortar; setting the stone and brick in mortar beds following the taught string lines; cutting Queen closer and King closer bricks to close the Flemish Bond pattern at openings and corners where called for; carefully hoisting with block and tackle the prefabricated window and

door frames; nailing temporary diagonal bracing to hold these frames in place until the masons had anchored them into the rising walls; building wood centering (forms) so the masons could lay up arches; approving the sizes and profiles of the decorative soapstone water table moldings and marble belt courses, panels and keystones; seeing that the rough carpentry framing followed the structural plans; approving the split and dressed wood shingles; overseeing their installation with the correct exposure and nail placement; applying lead flashing to make the building water tight; seeing that the flooring was nailed tight, and that the finish milled wood trim had the proper profiles to carry out the predetermined architectural style, and ensuring that it was well anchored to the brick walls and adequately prime painted; watching that the plasterers mixed enough hair into their ground coat and that the finish white coat was floated smooth; and supervising the painters to see that their finish coats were of the correct mix of linseed oil, pigment and driers, and that the brush strokes followed the wood grain and provided full even cover.

Scaffolding made of long vertical poles tied with rope or thongs to short cross timbers called putlogs, provided working stages as the building went higher and higher. Hearty feasts rewarded the workmen when the second floor, attic floor and the cupola were completed.[4] The starting date of the project was commemorated by placing the lead numerals 1733 at each downspout conductor head of the north front facade.

Before this construction process could start there were several years of planning. A chronology begins with the 1729

determination to build "a House for the Assembly to meet and sit in." The Assembly appointed a committee of Andrew Hamilton the Speaker of the House, Thomas Lawrence and John Kearsley, "impowered to build the same." Plans and elevations were prepared and presented by members of the committee, and Hamilton's plans were chosen as the "least expensive ...the most neat and commodius." By 1732, two thousand pounds had been appropriated, the ground purchased, workmen hired, materials ordered. And by 1733 the building process was started.[5] In that year four hundred additional pounds were allotted for building the offices (wings) "for the greater Security of the publick Papers."[6]

In January of 1736 the "Offices adjoining the State House,...[were] now almost compleated."[7] And the master carpenters Edumund Woolley and Ebenezer Tomlinson, appealed to the Assembly "they have almost finished that Part of the State-house, which they undertook to perform," and asked for direction to "Compleat the same." So that they could be paid, they asked that "Persons ... be appointed to assist in measuring their Work in the State-house, and the adjoining Offices." In the same minutes the Assembly resolved they could not afford to finish their room with wainscoting and suggested instead it "be finished with good Plastering, a proper Cornish round the room next the Ceiling, and a surbase below."[8]

By 1740, with Woolley and Tomlinson's work completed, "John Harrison, Carpenter [had been] employed to do the Inside Work of the State-house, which he had accordingly performed" and

asked that his work be measured. It is very likely Harrison's work was for the Assembly Room and indeed included the east wall wainscoting.[9] On June 6, 1741 the Assembly directed, "we think it necessary, that the Assembly-room ...should be plastered, glazied, and finished, all but the Cieling and upper Work to be finished as soon as Workmen (plasterers) can be got."[10]

The following August 15, 1741 "a Proposal relating to the carved Work" was presented for approval, probably referring to the Assembly Room tabernacle frame frieze and Ionic pilaster capitals.[11]

By August 20, 1741, Andrew Hamilton had died and a new committee of "Superintendents of the Building" was chosen: Thomas Leach, Isaac Norris and Edward Warner. The executors of Hamilton's estate were ordered to turn over to them all "Materials of the Building, as remain in their hands."[12]

Possibly still using carpenter John Harrison, the Assembly in 1743 "Ordered, that the Superintendents ...proceed to finish the Room at the West End, as soon as conveniently maybe."[13] By November 29, 1743, "A Plan for the Finishing the Court Room ...and the Piazza's between the chief Building and the Offices, was laid before the House, and approved of; and the Superintendents ...[were] directed to go on to finish the same ..."[14] The following August 24, 1744, a "Council [between the Lieutenant Governor and the Delaware Indians] was held ...in the Chamber of the Supreme Court," indicating that this room was possibly complete and that the Governor's rooms on the second floor were not.[15] In the same year the

Assembly asked that the "Superintendents ...provide some Means of breaking the Echo in the Assembly-room, that the Members may better hear one another."[16]

Not until 1747 do we find the second floor nearly done: "the Secretary is directed to wait on the Speaker to know if the same [Council Chamber] be now in order, or can with any conveniency be put into order for the use of the Council."[17]

Between 1750 and 1756 the masonry tower with a wood steeple was added at the south side, providing a thirty-six-foot-high room with a Palladian window and a new grand staircase to the second floor, probably the grandest staircase in the colonies at that time. Once the new stair was framed and passable, the early stair in the Central Hall could be struck and the hallway walls adorned with the handsome paneling we know today. The construction and "life" of these two hallways is the main subject of this report.

Early in this last building phase a committee room was added east of the Assembly Room, tucked behind the solid rear wall of the east arcade so as not to destroy the symmetry of the principal facade (Illustration 7).[18] And to impress the citizenry, yet another symbol of achievement was added to complement these of the grand stair and Palladian window: a tall case clock was built up against the west elevation, with a matching clock head at the east gable. In 1756, with the application of the last coats of paint, the State House was complete.[19]

Some current critics hold the opinion that the State House exterior has a great deal of charm but its appearance

architecturally can be described as ambitious, flawed and naive in comparison with the architecture of the mother country.[20]

But from the standpoint of the average American colonist the State House of Pennsylvania was a building of grandeur and a pleasing composition of the most fashionable architectural elements, "a large handsome building."[21]

THE DIVISION OF RESPONSIBILITIES IN DESIGNING AND BUILDING THE PENNSYLVANIA STATE HOUSE

For a number of years there has been a controversy over who designed the Pennsylvania State House, who made working drawings and who superintended the construction. This chapter gives the writer's opinion on the division of these responsibilities. Briefly, a fresh look at the available documents confirms that the first phase of the building, started in 1733, was conceptually designed by the Pennsylvania Assembly's appointed Superintendent for the project, Andrew Hamilton, and the detailed working drawings were probably produced by the contract carpenters Edmund Woolley and Ebenezer Tomlinson. The overall supervision to see that the building followed the intended concept was the responsibility of Andrew Hamilton. The time span of the building project was such that other individuals took over these roles in subsequent phases.

It will be helpful to outline twentieth century construction practices and terminology so that we may better understand the division of responsibilities in building the eighteenth century Pennsylvania State House. A building project proceeds today as follows: the client determines the needs and the program; the architect conceives the design for the client's approval; the architect prepares working drawings and specifications for bidding by general contractors, who, in turn, receive bids from sub-contractors. The selected general

contractor supervises the work of the sub-contractors; the architect and owner's representative visit the building site periodically to inspect the work and review and approve shop drawings of details. Instead of receiving bids from general contractors, some owners today select a construction manager (CM) during design. He works as the owner's agent, receiving bids from sub-contractors, each of whom enters into a contract directly with the owner, while the CM supervisors and coordinates the work overall. These present day practices are similar to the methods of the eighteenth century State House building project.

In the eighteenth century less complicated buildings than the Pennsylvania State House were apparently built by the cooperation of client and master carpenters, or master builders as they were also called. The carpenters were the logical choice to be masters of the projects as they were involved with it the longest, from laying out the perimeter of the building for digging its foundations, to applying the last pieces of hardware on the doors.[1]

The Pennsylvania State House however was not only the most complex of buildings, but it was a public responsibility. The 1729 Assembly who voted the project to be done and who funded it, appointed Superintendents to watch over it and carry it out.[2] One of these superintendents, Andrew Hamilton, who was also Speaker of the Assembly, played the key role in the choice of the site, determining the building program, conceptual plan, and style of architecture that was approved. Hamilton on behalf of the assembly then went on to purchase

the site, hire the workmen, purchase the materials, and provide daily supervision to see that the building met his approved concept.[3] The carpenters, Edmund Woolley and Ebenezer Tomlinson, were under contract for only the framing, the floors, the woodwork of the windows, doors, roof, cornices, cupola, a balcony, and the stairs.[4] Woolley clearly did not design this building as he and his partner Tomlinson, upon being "almost finished" with their contracted work, asked "the House ... to direct in what Manner they shall compleat the same."[5] Of course, there were separate contracts for masons, joiners, carvers, plasterers and painters. Each of these contractors were paid after their work was "measured", or inspected, for its value.[6] Relating this scenario back to the twentieth century, we have Andrew Hamilton corresponding to the architectural designer and construction manager of today.

But who made the working drawings and wrote the specifications? Today's detailed specifications, which spell out the type and quality of materials to be used, probably were never written as a separate document in the eighteenth century. The specific type of wood to be used, for instance, was probably established orally between Andrew Hamilton and each sub-contractor or tradesman. The authorship of the working drawings however we wish to establish through a more detailed examination of the surviving drawings and documentary evidence of drawings which have not survived. We must understand why the surviving drawings were made, how they were used, and therefore why they survived while others did not. And we must

relate Hamilton and Woolley to these drawings in order to establish who could have made the working drawings.

The two surviving drawings of the Pennsylvania State House, made for the first phase of construction, show the building without the tower which was to be added some twenty years later. Neither of these drawings reflect the building entirely as it was built. Illustration 1 contains a front elevation of the main building, piazzas and wings, and first and second floor plans. Illustration 2 has only first and second floor plans. The main building elevation in Illustration 1 differs from the actual building in that it lacks a second belt course between the first and second floor windows. The elevations of the piazzas and wings do not at all represent subsequent views of these structures. The presentation of these elevations in Illustration 1 is extremely naive, in representing the heavy main cornice with a single line, and in omitting the mass of the piazza roofs above impossibly thin columns. The second floor plan of Illustration 1 calls for four small rooms and stairhall along the south side of the Long Gallery, whereas we know there were only two rooms and stairhall. The second floor plans of both Illustrations 1 and 2 neglect to show the garret stair which we know was built within the southeast room against its west wall.[7] And the first floor plan of Illustration 2 has too many open archways between the central hallway and the court room to the west. This drawing shows seven archways while there are only three full archways and two half archways now hidden by paneling. It is clear these drawings were made before construction. Indeed, Illustration 1 is

dated 1732 above the entrance, the year before construction began. We conclude these drawings are conceptual design drawings. Illustration 1 was undoubtedly made by Andrew Hamilton, the Assembly's Superintendent, or his draftsman, as it was found among his family papers. Illustration 2 is not as easily attributed, for it was found among the Proprietors' papers, the "Penn Papers." Perhaps it was given to the Proprietors as an early submission of what to expect.

But what about working drawings? Do we have documentation for these? Not directly in the 1733 phase of construction. But we do know that for the 1750s phase carpenter Edmund Woolley was the draftsman. And we have another document which shows that Woolley was fully capable of carrying out this task. Illustration 3 is a reproduction of a receipted bill for a set of drawings of the Pennsylvania State House made by Edmund Woolley in 1735. Apparently he made this set for John Penn to take to England as a record of progress.[8] This set, including plans and elevations of the main building, piazzas and wings, unfortunately does not survive as it would have been the best record possible of the State House as first built.[9] The 1735 date of the bill means the drawing recorded the building close to "as-built": in January 1736 Woolley and Tomlinson petitioned that their work was "almost finished".[10] For John Penn to have asked Edmund Woolley to make this record set not only shows that Woolley knew the building well, but may indicate that Penn knew Woolley could draw better than other available draftsmen. Indeed, as will be discussed later, Woolley owned an architectural library, showing an

invested exposure to the subject.

Believing that Woolley was a capable draftsman, what documentation do we have for Woolley making working drawings in the 1750s, as noted before? In Woolley's 1750s list of tasks for the construction of the tower, committee room, central hallway paneling, tower stairhall and tall case clock, the first item listed is "drawing drafts" (see Illustration 4 & 4a). Until now this may have been overlooked, or interpreted as drawing up bills or orders for payments. But as Woolley's next listed tasks relate to accounting for materials, and as his labor accounts follow this descriptive paragraph, it seems unlikely that "drawing drafts" relates to Woolley's accounting. But, since the term "drafts", or "draughts", also means delineations or drawings, this is the definition which seems more likely.[11] Thus we may believe Woolley was making drawings, working drawings, throughout his contract for these substantial additions to the State House.

The question then is, could not Woolley have made working drawings during the 1733 phase of construction as well? Very possibly he did, but as a younger man he may have neglected to make this task part of his contract, only to be sure to list this time-consuming task first in his 1750s description of work.

Working drawings are such an important part of the building process, whether made today by the architect to establish intent, scope and detail, or, as in the eighteenth century, made by the carpenters to show the client that what they wanted was understood by the contractors, and then to enable

the work of all trades to fit together in the same plan.

The question can now be asked, why have the conceptual design drawings survived but not the working drawings? As the reproduction of drawings in the eighteenth century was not what it is today, the original working drawings would have been taken on the job, down in the foundation trenches and up on the scaffolding. They were folded and unfolded, laid out on lumber piles or stacks of bricks. The original working drawings were doubtless worn out on the job and discarded.

The conceptual drawings, on the other hand, once approved and shown to the master tradesmen, and followed by the master carpenters in making the working drawings, were apparently retained by the owners or their representatives, among whose papers they survived until today.

To further study the likelihood of this theory, Appendix A lists known eighteenth century Delaware Valley building drawings, dividing them up by intended use, and noting whether or not they still survive. The conceptual design drawings have had far the best survival rate.

BRIEF CHRONOLOGY:

CENTRAL HALL (CH), TOWER STAIRHALL (TSH)

1733+:	Construction of the State House front building. CH had brick floor, unfinished walls, and stair to second floor was placed in south end.
1750-56:	Tower and steeple were added, and stair to second floor moved into TSH. CH Doric paneling and TSH Doric, Ionic and Corinthian woodwork added.
1789:	Archways between CH and Supreme Court Room closed with partitions.
1802:	C.W. Peale added a room at TSH upper landing.
1816:	County Commissioners added light in CH via new fanlighted doorway at north entrance, and added new CH ceiling with center rosette and border moldings.
1854:	City Council rooms installed at second floor and stair to steeple and attic moved to TSH upper landing. CH repaved with flagstone.
1875:	Paint removed from CH and TSH woodwork.
1896-98:	Restoration Architect T. Mellon Rogers opened archways between CH and Supreme Court Room, restored north entrance and laid a brick floor.
1951:	TSH slip-in treads installed by National Park Service.
1955-60:	CH & TSH paint removed, woodwork repaired, and original colors restored.
1967:	CH & TSH brick floor restored and stair reinforced.
1976:	Liberty Bell moved from TSH to its own building in Independence Mall.

CENTRAL HALL-PRE-1750s

In 1956, during paint removal, National Park Service architectural analysis of the Central Hall revealed what this room looked like prior to the installation of the present 1750s paneling, and prior to the addition of the tower and grand staircase leading to the second floor.[1]

The water soluble paint remover used to remove the accumulated paint layers on the two-hundred-year-old paneling caused an unexpected side effect: the woodwork, having soaked up the water, shifted, and the animal glues that had bonded small pieces of wood, dissolved. The woodwork, as a result, needed much repair.[2]

The resulting removal of woodwork during these repairs gave the historical architects a chance to look behind at the 1733 brick bearing walls and thereby learn that the space was unfinished before the 1750s paneling was added. Not only was the brickwork bare, clean of any plaster stains, but few nailing blocks had any nails or unused nail holes left from earlier usage.

It is interesting to note that the Central Hall is not centered on the north and south entrances. It appears from the physical evidence that in order to provide equally sized rooms for the Assembly and Supreme Court, the Central Hall Assembly Room wall was placed westward a distance equivalent to the projection of the chimney breasts in the Assembly Room. This asymmetrical placement is best seen today by comparing the panel sizes on each side of the north entrance and those

which flank the south archway to the tower (Illustration 8). Such a decision to shift a wall slightly had to have been made before the stone foundations were laid. More than likely this asymmetrical placement was laid out on a dimensioned working drawing of the building's plan.[3] It was certainly not anticipated on the schematic presentation drawings (Illustrations 1 and 2), which both show the hallway absolutely centered about the front and rear entrances.

The Central Hall floor was laid directly on grade. No cellar was excavated beneath it.[4] The flooring material was of brick laid in herringbone pattern. The bricks were found laid right up to the masonry walls under and behind the 1750s paneling, showing they predated the paneling. It was also found that the brick floor was laid at a lower level than the exterior door sills.[5]

Brick entrance hallways can be found in numerous early Delaware Valley houses. Stenton (1728) in Germantown and Primitive Hall (1730s) in Chester County are two examples. To provide a good place to stamp off one's boots brick floors were a good choice, and one which has served through the life of the building.

From the 1730s to the 1750s, at the southern third of the space, a stairway led to the second floor. It started along the east wall, turned across the south wall and arrived at the second floor along the west wall. This stair is shown in the 1730s preliminary schematic drawings, and confirmation of its existence and layout was found in 1956 while various sections of the 1755 paneling were removed and bearing pockets were

seen in the brick walls. These pockets, when plotted graphically, proved to be for the support of the structural framing of the stair landings.[6] There was apparently some sort of wall handrail accompanying the stair, as nailing blocks with nail holes in them were found in the brick wall related to hand rail levels.[7]

In this early period the Assembly Room doorway was enframed by its present paneled jambs and elaborate trim. But above the door (mounted on wall boarding) was a triangular pediment as opposed to the present baroque open scrolled pediment (Illustration No. 22). This detail was discovered by Resident Architect Charles S. Grossman in March 1956, when the paint layers on the surrounding paneling were removed to reveal a red iron oxide stain in areas which were exposed to paint, and no stain where the triangular pediment had been mounted against the boards.

Proof that the triangular pediment predated the present 1750s woodwork is clear in that its outer corners extended beyond the lines of the present paneling imposts.[8] To preserve this evidence for future study, the National Park Service covered the surface of this particular boarding with sheet metal before it was repainted.

It is possible the pre-1750 north and south entrances were trimmed to match the Assembly Room doorway with a triangular pediment. It is <u>also</u> possible that these two important doorways were given open-top scrolled pediments, for the design source of this detail predates the start of construction of the State House: see Illustration 20 & 21,

James Gibbs, A Book of Architecture, London 1728, plate 106.[9]

The incomplete state of the Central Hall space was only emphasized by the unfinished edges of the 1740s Supreme Court Room paneling as it wrapped around the archway piers. This condition was found behind the 1750s engaged column pedestals when they were removed to look for evidence of the early floor pattern.[10]

The open archways to the Court Room were not only planned to augment the Court Room public space, but they undoubtedly were intended to give some light to the Central Hall. There also would have been some light coming down the early stairwell from a second-floor-center south window.[11]

Despite this borrowed light, the Central Hall prior to the 1750s would have been dark. The brick floor and brick walls would not have reflected much light. One might wonder if the first-floor-level windows which flank the north entrance would have let in direct light. And what about those which originally flanked the south entrance before they were closed off by the addition of the tower?[12] Apparently these windows were installed primarily to satisfy the exterior facade design. They were meant to be blind, closed off, as the north ones still are, by paneled shutters painted black to simulate dark interior voids. Not only do the present shutters hang in an early eighteenth century fashion on foliated HL hinges attached by hand-wrought nails with leather washers, but the position of the windows in plan precludes their ever having been open to the interior. All four of these windows are so located that the Central Hallway side walls align with them.

This condition was intentional, for both preliminary schematic drawings show this to be the case. Illustration 1 shows the first floor Central Hall side walls stopping short of the exterior walls and the wall next to the Assembly Room has board partitions closing off the room by jogging to the side of what were to be the north and south windows.[13] The first and second floor plans of Illustration 2 show the walls abutting the windows except at the Court Room where just enough space is left for half arches at the north and south windows. It was never planned that these facade windows should be open to bring light into the Central Hallway.

What made the Central Hallway of the 1730-50s even darker was the lack of reflection from any plasterwork at the ceiling. Instead, one would have seen the undersides of the second floor floorboards and the bare wood of the joists and girders. No finish plaster ceiling was in place in the Central Hall prior to the 1750s, nor was there as yet any plaster on the underside of the second-floor floor boards.

The latter is a layer of rough coat plastering that was added for fire protection, soundproofing and a dirt barrier. Typical evidence of this rough coat plaster is found as white stains along the top edges of joists and girders and on the undersides of floorboards. Stain evidence of a finish plaster ceiling is seen on the bottom of the floor joists where the plaster keyed between the wood lath.

There is no plaster staining above the area of the 1750s cornice work, which shows that all the plasterwork was done <u>after</u> the 1750s woodwork was installed.[14] Thus with no

light-reflecting plasterwork in place, the Central Hallway was indeed a dark space for the first twenty years of its existence.

1750s COMPLETION OF THE STATE HOUSE

> Ordered, that the Superintendents of the State-house, proceed as soon as conveniently they may, to carry up a Building on the South-side of the said House to contain the Staircase, with a suitable Place thereon for hanging a Bell. [Pa. Archives, Eighth Series, IV, p. 3316,d. 1749]

The order was an understatement compared to the impressive result. The masonry tower building surmounted by a wood steeple could be seen for miles around. At closer range details of this addition were equally as prominent. Indeed, knowing what building elements were generally considered most valuable by eighteenth century fire insurance surveyors, it appears that the Assembly's building committee "pulled out all the stops" in planning the completion of their State House. The new tower and other additions of this period included the most expensive parts of buildings: a grand staircase, wall paneling embellished with elaborate carvings, a Doric frontispiece at the tower entrance, an enormous Palladian window above, and a tall case clock applied to the west gable with a matching head at the east gable of the main building.[1] The latter was a gargantuan enlargement of what would be found in the most affluent Philadelphia houses.

The work was under the overall direction of the Assembly's building committee, or the "Superintendents", as they were called. Isaac Norris, the Speaker of the Assembly, was the leading member of this committee. Edmund Woolley was hired again as the project master carpenter. And, as discussed earlier, Woolley listed "drawing drafts" as part of his work.

(Illustrations 4 & 4a). Very likely he drew those design and working drawings needed for this project.

The following is a discussion of what is known about the State House interior additions of the Tower Stairhall and the Central Hall. Since the use of these halls has remained more or less unchanged over the years, almost all of the original 1750s woodwork is still intact. Illustrations 8-13 are drawings of both halls overlayed with several textures distinguishing the original woodwork from later additions. Little restoration by the National Park Service was needed in these rooms, save a new brick floor, repairs to the woodwork and restoration of the original paint colors.[2]

ARCHITECTURAL DESCRIPTION OF THE 1750s

CENTRAL HALL AND TOWER STAIRHALL

(See Illustrations 8-13 for the room elevations and Illustrations 14-17 for the location of the architectural terms of this description.)

The design of the Central Hall paneling is derived from the Roman Doric order. It is probably the boldest architectural composition of colonial America. Inspired by plates in pattern books, the overall composition has a series of very large engaged fluted columns standing on flush board pedestals and supporting a corresponding entablature. Between the columns are keystoned archways leading to the Tower, North entrance, and Supreme Court Room, with symmetrically opposed simulated archways against the Assembly Room wall.

The entablature has a mutule cornice consisting of a cyma recta crown molding, a plain corona, and egg-and-dart carved ovolo bed molding. The entablature frieze has triglyphs with guttae alternating with metope panels. A plain architrave runs below.

The column capitals have egg-and-dart carved ovolo moldings and surface mounted flowers. Small egg-and-dart moldings surround the cornice soffit panels. The cyma reversa molding of the capitals and the other small cyma moldings of the paneling are carved with what was called by their carver, Samuel Harding, a "water-leaf molding" (Illustrations 5, 5a, 6 and 6a). The column bases and pedestal moldings are uncarved.

At the corners the wall spaces have two levels of field panels defined by applied bolection moldings. Between the two levels of panels a horizontal cornice visually extends the impost capitals of the archways.

Within the simulated archways at the Assembly Room wall are triangular pedimented tabernacle frames standing on pedestals and surmounted by urns. The term tabernacle frame is derived from the ecclesiastical ornamental recesses within which the Holy Sacrament or relics were stored. The pediments are visually supported on carved brackets, or trusses as they were often called, and they in turn are supported by carved open (recessed panel) pilasters. The inner arched frames have keystones carved with human masks.

The Assembly Room and north doors are trimmed with kneed double architraves. Over these doors are open-top scrolled pediments with human masks held between the scrolls. Carved cartouches hang in the pediment tympanum areas.

The Tower Stairhall architecture is derived from the Roman Doric, Ionic and Corinthian orders. Foremost in this space is a truly grand stairway (six feet broad) gracefully ascending with a generous ramped handrail. The Marquis de Chastellux remarked "this building is rather handsome; the staircase in particular is wide and noble."[1] To light the space is an enormous Palladian window, referred to by the carver Samuel Harding as a "Venneshon" (Venetian) window.

The three orders are distributed hierarchically with Doric engaged columnettes supporting the stair newels, the Ionic order used at the Venetian window and the whole crowned with a

Corinthian cornice.

The stairs are what is called "open newel" (stairs that turn around a large light well), and "open string" (you can see the profile of the treads and risers).[2] The outer strings have elaborately carved friezes at each stair landing and under the end of each tread is a carved scroll and leaf bracket. The railing has two turned and carved balusters per tread and large turned newels at the top and bottom of each flight. The handrail ends at the bottom newel in a large scroll. The dado wall paneling is capped with half rails echoing the ramped handrailing. There are open pilasters in the dado placed opposite each newel of the stair railing.

The three openings of the Venetian window are separated by open pilasters which contain carved drapes of bellflowers and are capped with carved Ionic capitals. A flat entablature with uncarved modillion cornice surmounts the side windows and pilasters.

The center window is arched and projects upward through and above the side entablatures. The archway is trimmed with an enlarged double architrave and a large ogee carved keystone. Flanking the Venetian window are tabernacle frames with triangular pediments above leaf carved friezes and trusses. The frames are eared at all corners and are supported below by inventive leaf carved trusses. The Venetian window composition sits atop a raised panel dado including pedestals beneath each pilaster. A paneled dado also lines the first floor walls.

The east and west wall windows have splayed jamb paneling

and are surrounded with double architraves. The upper window sills are visually supported by complex large acanthus leaf trusses flanking raised panels.

The openings leading to the Central Hall and second floor Lobby are arched with large ogee carved keystones and double architraves supported by open pilasters. The second floor open pilasters contain carved drapes of bellflowers.

The whole room has a Corinthian cornice at the ceiling with large dentils and carved acanthus leaf modillions between which, mounted on soffit panels, are carved flowers.

The derivative Roman architectural orders of the Central Hall and Tower Stairhall were first revived in the fifteenth century in Italy. The Italian Renaissance architects did not just copy the ancients, but adopted classic Roman orders and forms in inventive combinations. This new use of Roman architecture made its way through the Continent and finally to England.

English architect Inigo Jones (1573-1652) studied in Italy, viewing first hand the antiquities and this new trend principally as developed by architect Andrea Palladio (1508-1580). Jones, and British architects such as Christopher Wrenn (1631-1723), who studied the Renaissance as developed in France, influenced all architecture in England.

During the great prosperity of the late seventeenth and throughout the eighteenth century many British public buildings and manor houses were built by the cultured gentlemen architects of the day. These buildings were greatly influenced by the Palladian style, and their architecture

became known as Georgian, spanning the reigns of Queen Anne (1702-14) and George I-IV (1714-1830).

The publication of architectural books filled with engraved plates of plans, elevations and details, had the greatest effect in spreading style changes. Indeed, it was due to these books and emigrating trained craftsmen that new architectural designs crossed the Atlantic. Architectural pattern books, or handbooks, were owned by American gentlemen, builders, craftsmen and libraries such as The Library Company of Philadelphia and the library of the Pennsylvania Assembly. Both of these libraries were housed on the State House Square, making their architectural books available to the State House building committees and master builders.[3]

Edmund Woolley himself, as a master carpenter and a member of The Carpenters' Company of the City and County of Philadelphia, owned architecture books. Upon his death his "Books of Architecture" along with his "Carpenters Tools" were to be sold and the proceeds divided between his daughters.[4] To his son he left "all my Library of Books/except the Books of Architecture afsd." To merit so much attention Woolley's architectural library must have been substantial.

Fortunately, at least two of Woolley's books have survived. The collection of the Library Company of Philadelphia possesses one, a copy of William Halfpenny's Practical Architecture Representing the Five Orders from Inigo Jones and other Celebrated Architects (London, c. 1724-36). The title page is missing, but on the second page is inscribed: "Isaac Coats bought at Ed Woolleys Vendu this book February 14th

1772" and at the top of the page is the recognizable signature "Edmund Woolley."[5] The second book of Woolley's to survive, now owned by Independence National Historical Park, (INHP-8273), is The Carpenters Companion by James Smith (London 1733). This book also carries a recognizable Woolley signature, and a title page inscription: "Isaac Coats bought this Book at Edmund Woolleys Vendu February 14th 1772." Hopefully Coats bought other volumes which will some day come to light.

Meanwhile, let us now see what book plates the Building Committee, Woolley, and the carver Samuel Harding, considered in arriving at the designs for the Central Hall and Tower Stairhall.

Of the books which we know Woolley owned, Halfpenny's Practical Architecture and Smith's The Carpenter's Companion, the latter contains mostly rough carpentry plates such as how to frame timber floors, partitions, and trusses. Plates of the four Roman style orders appear at the end of the book, and added to each of these are neatly inked dotted lines intended to better relate the proportions of internal parts to each other. We will never know if Woolley made these dotted lines--the only marks added to a very clean book.

Halfpenny, on the other hand, presents plates which are visually related to elements used in the Central Hall and Stairhall. The plates are each accompanied by a table of proportions. Plate 44 (Illustration 18) is a possible source for the two Central Hall tabernacle frames which flank the Assembly Room doorway. It is titled (on Plate 43): "The

following Window or Neath [Nitch] is taken from the Works of the Moderns, and according to ye Proportions are exactly Calculated." The accompanying table is laid out so that by providing one dimension one may find the recommended corresponding dimensions for the other parts which make up the whole. The proportions given in this plate do not correspond to those of the Central Hall frame. Halfpenny's composition, however, is very close in appearance with a masked keystone-arched interior frame surrounded by a triangular pediment supported by trusses and open pilasters, although Woolley and the Building Committee chose to use a closed pediment where Halfpenny showed an open pediment.

Plate 46 of Halfpenny, entitled "A Window from ye Modern Architects," shows a Palladian or Venetian window. Its proportions do not exactly parallel those of the Tower Stairhall grand window either, but the plate could easily have suggested to the Committee and Woolley that they adapt such a composition.

Although we do not know of the other books Woolley owned, we are aware of other likely design sources. The second edition of James Gibbs' Book of Architecture Containing Designs of Buildings and Ornaments (London, 1739) was owned by the Pennsylvania Assembly and therefore was readily available to the Building Committee and to Woolley.[6]

There are several plates which include Venetian windows. Plate 4 in particular is rendered with the Ionic order although its setting is within the apse of a church and is thereby contained unto itself. Plate 68 (Illustration 19), on

the other hand, details a Venetian window flanked by panels with a flat entablature above laid out in a very similar way to the Tower Stairhall Venetian window.

Plates 40 and 45 show fully paneled Central reception rooms with arched niches between pilasters. Although we cannot prove that these two plates were the design source for the State House Central Hall, they certainly indicated the fashion of the day.

What makes it seem even more likely that Gibbs' work was consulted are details which directly relate to those used in the 1750s State House work. Plate 88 details drapes of bellflowers in open pilasters similar to those in the Tower Stairhall. Plate 109 features a tabernacle frame supported on trussed open pilasters and a pedestal. A masked keystone-arched frame floats within, making this plate similar to the Central Hall tabernacle frames. Plate 119 delineates an urn seated at the peak of a pedimented tabernacle frame, giving precedent to those in the Central Hall. Plate 106 shows three overdoor pediments (Illustration 20). Elements from two can be combined to form the baroque open-scrolled pediments with human masks and cartouches above the Central Hall doors at the north entrance and the door to the Assembly Room (Illustration 21).

We know of at least four other architectural books in the Pennsylvania Assembly's Library: Colin Campbell, Vitruvius Britannicus: or the British Architect (London, 1717-25); James Gibbs, Rules for drawing the several parts of architecture...(London, 1753); Andrea Palladio, The

Architecture of A. Palladio, in four books, Revis'd...by Giacomo Leoni, (3rd ed; London, 1742); and Puteus's Rules for drawing Architecture in perspective, by John James (n.d.).[7]

We imagine the process of designing the interior of these two spaces may have started in a meeting between the master carpenter, Edmund Woolley, and the building committee led by the 1750s Speaker of the Pennsylvania Assembly, Isaac Norris. One envisions before them on a table, copies of some or all of the above books, a floor plan, and the dimensions of the ceiling heights. Woolley, pencil in hand, would have noted which architectural details were desired: the open newel "ramp'd" rail stair, the tabernacle frames, the engaged columns, etc. As a member of the Carpenters' Company of the City and County of Philadelphia established in 1724, Woolley would have sketched wall elevations and worked up some estimates from the Company's list of prices, ready for the committee's next meeting.

Lee H. Nelson, Project Architect for the NPS restorations of Independence Hall in the 1960s, said of the product of the 1750s "I think it was a rather good assimilation of design details in an overall composition that is well thought-out." [8]

Eighteenth century Delaware Valley houses which have center halls with stairways in front of the rear doors have the same neat detail as the Tower Stairhall where the stair soffit is flush with the door head. Historical Architect William Brookover points out that Woolley showed his capabilities when he applied to this vernacular practice the elaborate open newel stair, the interior and exterior Palladian window and

the Doric frontispiece below.

In addition to organizing the design details in a disciplined manner, Woolley straightforwardly handled architectural conditions imposed by the building. He overcame the asymmetrical placement of the Central Hall partitions in relation to the facade-centered entrance by repeating all architectural elements on either side of the entrance while the dimensions of the wall panels actually vary, thus creating an illusion of balance (Illustration 8). Unless pointed out this variation goes undetected.

Also in the Central Hall, Woolley laid out the entablature to meet the vertical divisions of the full Doric order, but found that the prescribed horizontal repetition of the freize triglyphs and cornice metotypes would not evenly fit the length and width of the room. His practical solution was to install the normal repeat for most of the wall and to then lengthen the metope panels next to the room corners (Illustrations 8 and 9).

Classic detailing forgives such deviations. The strong repetitive motifs and their shadows, if "balanced" around a center axis, are as soothing to the eye as a balanced but unevenly formed flower. Woolley would have been comfortable with this (a state of mind difficult for twentieth century historic-reconstruction architects).

The Tower Stairhall is strongly focused at each wall by the centered openings: Palladian window at the south; archway openings at the north; and stacked windows at the east and west walls (Illustrations 10-13). In each case Woolley laid

out his Corinthian cornice modillions starting with one centered above these openings (albeit the north center modillion is a little off axis). Woolley then spaced the modillions and round soffit flowers so that he had a flower in each corner.

The modillions at the north and south wall cornices are approximately the same distance apart. Woolley, however, varied the spacing at the east and west cornices above the window openings. To strengthen the relationship of the cornice modillions to the centered window openings, Woolley arranged the modillions such that there would be one directly above each window architrave, lining up their outside edges. To accomplish this layout it was necessary to shrink the spaces between the modillions above the windows, changing the soffit flowers there from round to oval. This refinement also goes unnoticed by most viewers (Illustration 11 and 13).

At the extremes of the south wall's Palladian window composition, Woolley avoided the intricacy of having the pilaster pedestals, bases, and caps return on themselves in the corners. He just let them "die" into the wall. And at the Palladian window sash openings the impost cornice and architrave again were allowed to die into the sash, while the Ionic capital volute was simply cut in half. In both instances these members are repeated on the exterior of the building as a part of the exterior Palladian window treatment. Of these details, only the cut-off volute on the interior with a full volute adjacent on the outside of the sash could be thought somewhat ill-conceived. On the whole, considering

time and place, Woolley handled his woodwork with a good understanding of the design sources and was sensitive in making pragmatic adjustments.

INSTALLATION OF THE CENTRAL HALL WOODWORK AND CONSTRUCTION OF THE TOWER STAIRHALL

Two valuable construction documents survive from this 1750-56 building period. One is the summary bill of the project's master carpenter Edmund Woolley, in which he gave the scope of his additions to the State House including: the tower, its stairhall, the exterior tall case clocks, the Committee Room, the Central Hall woodwork, the second floor Lobby and its stair to the steeple (see Illustrations 4, 4a and 7). As discussed earlier, it is very likely that Woolley made the drawings needed for these 1750s additions, for he wrote first among all his tasks that of "drawing drafts." He next mentioned making the lists and sizes of materials needed. Woolley's somewhat stream-of-consciousness description of the work is not in any chronological order and ends with the sentence: "With many Other Jobs not here mentioned for all which Work My Charge is as follows..."

Woolley merely said of the two spaces being discussed here: "...Also the Entry Hall of the State house as its now finished; the Stair case and Stairs and the rest of ye work belonging to the Tower is now finished both out and inside from the Vane to the foundation..." No indication of the construction sequence is given.

After his narrative Woolley itemized the days or half-days his men worked and for what pay. The total carpentry costs, including that of Woolley himself, came to 1490 pounds, 15 shillings and 5 1/2 pence. We cannot isolate the carpentry

costs for the architectural finishes of just the Central Hall or Tower Stairhall. Nor can we say exactly how long it took to do that work or precisely how many men took part.

We have, however, confirmed the identities of some of the carpenters who worked on the Central Hall. Behind the projecting entablature on the upper extensions of the wall paneling six signatures were found. A "TN" with flourishes was inscribed in pencil.[1] The initials "WC" were carved with a chisel, and written in pencil was the name "Joh." These three sets of initials probably were written by three men listed in Woolley's bill: Thomas Neville, William Coatam and John Jones. The name "Whitehead Jones" was found. An inscription "George Alexander His House" was also found, and another, which was obscene, was directed at the carpenter "John Frost," and apparently written by Alexander.[2]

It is possible to compare the rates of these carpenters. Edmund Woolley charged 6 shillings per day, William Coatam was paid 1 shilling 6 pence (1/6), John Jones 4/6, George Alexander 1/6, and John Frost 2/6, increased near the end of the job to 3/6 per day. Benjamin Hollingshead worked throughout the project starting at 4/6 and ending at 5 shillings per day. Thomas Neville appears only on the first page of the bill and even then he apparently sent hired labor in his stead, which makes one wonder if he was the one who penciled in the "TN".

The second construction document is the more helpful for understanding the scope and sequence of the work. This is the bill for wood carving done by Samuel Harding between 1753 and

1756 (Illustrations 5, 5a, 6 and 6a).[3] The items listed correspond to most of the carving, thus confirming that most of the original woodwork of both the Tower Stairhall and Central Hall is still in place (Illustrations 8-13). Those carved items which also date from the eighteenth century but which do not show up on Harding's bill are the open top scrolled pediment over the Assembly Room doorway (Illustration 21) and the urns above the east wall tabernacle frames in the Central Hall. We have suggested earlier that this pediment may date from the pre-1750s. But it is also possible it was carved in 1756 by Bryan Wilkinson who charged "for carved Work, done for the State House" amounting to more than 85 pounds. As Wilkinson's bill is not itemized, we are unable to say just what carving he did.[4]

What is particularly valuable about Samuel Harding's itemized bill is that it indicates the construction sequence for this 1750s period. Short of the finish painting, the addition of this carving would have been about the last construction task. Thus the sequence of work for this period is fairly well established. In January 1753 Harding charged for the carving applied to the exterior of the steeple. He next listed that embellishment carved for the Committee Room ("the green room") built next to and east of the Assembly Room (see Illustration 7), and for the second floor Lobby stair to the steeple. From January 1754 to January 1755 he carved the work of the Tower Stairhall and "the Grand Staircase." Also, by January 1755, he had completed the carved work for the Central Hallway, or "passage" as he called it.[5] By January

1756 he had completed the heads of the two exterior tall case clocks.

Thus the construction sequence for these 1750s additions to the State House must have gone something like this. Deep trenches were dug for the three-foot-thick stone foundations on the east, west and south sides of the tower. The stone walls were clad with a Flemish Bond brick veneer above grade. The north tower wall, as it was added atop the existing brick south wall of the main building, was built all of brick which made it somewhat thinner than the other three stone and brick veneer walls. As the masons laid up the walls the carpenters provided the scaffolding needed and installed the floor and stair framing, window frames, and wood forms, or centering, on which to construct the masonry arch for the Venetian window and the round windows of the tower walls.[6]

Since the new tower was built partly on top of the south exterior wall of the 1730s main building, changes were necessary for that wall. The frames of the four blind windows on the first and second floors were removed and the openings were filled with masonry. This created a solid wall to receive the weight of the higher tower wall added above. At the same time the 1730s south doorway was enlarged for a wider opening between the new Stairhall and the Central Hall. The east jamb of the doorway was cut back and no doubt the head also cut away to create the tall archway matching in height those leading to the Court Room.[7]

The early stairway in the Central Hall was struck as the new grander stairway was being framed. It was necessary that

this be coordinated because several of the cantilevered framing members needed to support the new second floor level stair landing extended into the main building in the space which had once been the open stairwell.[8]

The rough framing of the new stairway was used throughout the construction for access to the upper tower and steeple. The finish woodwork and carving was not installed in the Tower Stairhall and Central Hall until all the upper work was completed, even that of the new second floor Lobby.

In both the Central Hall and Tower Stairhall, paneling was installed in units. These consisted of vertical stiles and horizontal rails joined with mortise and tenon joints and locked together with hand-whittled pins. The field panels, set in grooves cut into the edges of the stiles and rails were free to expand and contract with seasonal changes. These assemblages were put together either at mill shops or by the carpenters themselves on site. To erect these prefabricated units a team walked them up to the vertical position much as one "steps" a ladder. A line may have been tied from the paneling top rail and through a pulley attached to the framing above to assist in pulling the panels upright from the floor.

Once vertical, the carpenters fastened the paneling units to the brick walls (Illustration 15). Hand-wrought iron anchors were driven into mortar joints in the brick walls. The paneling units were held fast by rose head hand-wrought nails driven through holes in the anchors and into the edges of the stiles or rails. Usually about six such anchors sufficed to hold a unit in place.[9]

The gaps between the paneling units were bridged and hidden by the open pilasters of the south wall of the Tower Stairhall and the round engaged fluted columns of the Central Hall. Also covered were the short rails which, with tenons at each end, tied one paneling unit to the next.[10] Once secured to the walls, the paneling supported not only the engaged columns and pilasters but also the pedestals beneath the columns and the entablature above.

The design of the elaborate 1750s Central Hall woodwork could not have been anticipated when the main building was first being built, since part of the construction system was not utilized in the final work. Near the ceiling of the Central Hall the walls had many brick-sized wood nailing blocks laid with the brickwork.[11] These nailers were usually intended to anchor running cornice work. Yet, in the case of the Central Hall, very few of these nailing blocks were used. As just explained, the 1750s paneling was anchored by iron anchors spaced the full height of the paneling, and the entablature woodwork was then attached to the paneling system and hung from wood hangers that were attached to the floor framing above.[12]

The engaged columns of the Central Hall are hollow, made up of long wedge-shaped strips glued together and backed up with glue blocks.[13] The column capitals and bases were similarly made up of wedge-shaped blocks glued together.[14] The columns, capitals and bases may have been worked into the round on a lathe. The flutes were cut with hand planes; the ends of each flute were finished with chisels.

Hand-wrought finish nails were used throughout to attach moldings. The nails were countersunk, the length of their heads running with the grain, and hidden with white lead putty. The nails varied in size according to the size of molding to be applied. Animal glue was used to apply the turned wood guttae into the soffits of the cornice mutule blocks.

Also applied with hand-wrought finish nails were Samuel Harding's carved flowers in the Tower Stairhall cornice. These flowers were marked in pencil on the back whether they were for "corner" positions or the "N", "S", "E", or "W" cornices (see Illustration 46).[15]

As described in the preceding chapter, above the Tower Stairhall east and west windows, the soffit flowers are oval. In fact, a white chalk drawing was made to locate one of the oval flowers (see Illustration 45).[16] Standing high on the west wall scaffolding to lay out the modillion and flower pattern, Edmund Woolley would have sketched for Harding this deviation in form, or else the drawing is Harding's acknowledgement that he understood the carving instruction.

Drawings, or at least the requisite dimensions, were probably taken by Harding to his shop where lengths of moldings were carved and then delivered to the job for fitting and installation by the carpenters. Possibly an excess or perhaps the carpenter cut it too short, a length of what was called by Harding "three leaf grass," which was used as the bed molding around the Central Hall cornice mutule blocks, was found lying loose behind the paneling, having been broken in

three pieces (Illustration 25).[17]

Harding's bill admits to a more serious error: "Memorandum of a frese for ye upper landing of ye grand stair case it was got out too broad at first so I carved three insted of two [.] ye add piece 20 foot 6 inches at 4S pr foot" (Illustration 26).

The woods used in the 1750s have been identified by the U.S. Forest Service Forest Products Laboratory.[18] The Central Hall engaged columns are made of Atlantic white cedar, the wall paneling of both the Central Hall and Tower Stairhall is of yellow pine, Eastern white pine, and some Atlantic white cedar. The carved moldings were done in yellow pine and white pine. The delicately carved masks of the Central Hall tabernacle frames are of yellow poplar, and the acanthus leaf modillions of the Tower Stairhall cornice are of sweet gum.

Samuel Harding's carving is skilled. Based on pattern book plates for the most part, its character brings the plates to life. The Harding work in the Central Hall is modest in scope in keeping with the Doric order of the room. The egg-and-dart bed moldings are strong, the water-leaf moldings obviously more delicate. The small flowers and "fishes" in the column capitals have distinct natural petals, as do his large flowers in the Tower Stairhall cornice. The small bearded masks of the two tabernacle frames have beautifully carved flowing hair and beards and features that are deeply incised to create the strong shadows needed to convey their expression (Illustration 23).

Far less skilled is the crowned mask of the open scrolled

pediment over the Assembly Room door. Hardings' bill did not list this work, and it is clear that he had no hand in it. The forms of the leaves, flower petals and beard are all treated alike with the same pointed petals, and regardless whether spines or hair, they are rendered alike with gouge work. The mask is large and three dimensional, but the carving is bland in treatment compared to that of Harding's (Illustration 21).

The Tower Stairhall carving, according to his itemized bill, is all Harding's work (Illustrations 5, 5a, 6 and 6a). Here the predominant Ionic and Corinthian orders call for much more embellishment. Harding's rendering of motifs from British pattern books is faithful without being forced or stiff. He had a real sense of the called-for forms and the results are graceful yet robust, and detailed down to the texture in the backgrounds. The latter can be totally lost under a few coats of paint.

For the time, Samuel Harding's carving can only be matched in quality by the carved scrolled pediment and composite pilasters at the chancel of St. James Church (1711), Goose Creek, South Carolina; the chancel carving, the Corinthian capitals and carved cornice modillions at King's Chapel (1749), Boston; the Ionic capitals of Christ Church (1759), Cambridge, Massachusetts; the Ionic and Corinthian capitals of the chancel of St. Michael's (1752), Charleston; the diminutive acanthus-carved keystones in the arched paneling behind the pulpit of St. Peter's (1761), Philadelphia; and the Ionic and Corinthian capitals of St. Paul's or Trinity

Church (1764), New York.[19] At none of these buildings is the carving so extensive as at the Pennsylvania State House Tower Stairhall: Corinthian modillions, flowers, Ionic capitals, drapes of flowers, trusses, friezes and tread-end brackets. Edmund Woolley's large window openings enable full enjoyment of Samuel Harding's craftsmanship (Illustrations 26-28, 38-39).

ALTERATIONS MADE OVER THE YEARS
IN THE CENTRAL HALL AND TOWER STAIRHALL

Eighteenth Century Alterations

Because these two grand spaces have continuously served their intended uses, few architectural changes have been made and none of these changes were radical. During the American Revolution, when the British housed American prisoners in the State House, fences were installed to separate visitors from the prisoners. In the fall of 1777 such a fence was described:

> After breakfast Mrs. Jenkins took me to the Prison to see my Father. Across the wide hall that ran through the house, almost half way down, was a heavy iron grating reaching from the floor to the ceiling; back of this was a close screen that reached to within two or three feet of the floor. The prisoners walked in the back part of the hall, with front and back doors open, for air and exercise. Guards were placed at both doors. Several gentlemen were walking backward and forward as we entered ... The screen being removed, I saw and talked with my Father through the grating.[1]

A fence may well have been built in the archway between the Central Hall and Tower Stairhall. Evidence that such a partition was also erected under and along the north edge of the stair south landing was uncovered when the National Park Service removed paint from the woodwork.[2]

The change having the greatest impact on the hallways came in 1789, when the archways leading to the Supreme Court Room were closed up with board partitions. Large double doors accessed the Court Room through the center archway, for which, along with the partitioning, the carpenter Joseph Rakestraw

was paid eight pounds, two pence.[3] The need for the partitions was surely to stop draughts. At the same time two stoves were installed in the Supreme Court Room, their flue pipes exiting through the west window sash, thence up the walls where they re-entered and utilized the second floor fireplace flues.[4]

If the Central Hall was dark before its painted paneling was added in the 1750s, it was surely dark now with the three archways closed, cutting out the light once borrowed from the Court Room. These archways remained closed until 1896, although architect John Haviland when considering the resoration of the Assembly Room c. 1830 said "The arches ... gave to this suite of rooms an extensive bold and imposing effect ... It would add much beauty...if this feature could be reinstated.[4a]

On February 9, 1785 it was recommended "Making a water closet on the landing of the stairs." The following May 14 a bill was submitted for "Cutting holes for water case through the wall of the State House." This improvement seems to have provided an inside "necessary" on the upper landing with the waste pipe descending outside the tower wall and thence to a privy pit adjacent to the tower east wall. In 1953 NPS archeologists found a hexagonal privy pit in that location with artifacts dating from 1785-1800.[4b]

Nineteenth Century Alterations

Charles Willson Peale is responsible for the next changes in these hallways. To improve the function of his museum on the

second floor, in 1802 he built a room: "I shall extend my Lodge over the Staircase to the South wall, which will make me a good room from which we can see all the visitors to the museum." Here Peale said he stored extra museum items and a Natural History Library.[5] No evidence has been found for this alteration. The room was probably high against the Tower north wall and east wall with windows in its partition looking down onto the stairway. Indeed there were complaints that it hid the Stairhall architecture. In the future if the present plaster skim coats are removed, perhaps scars of the room's structure will be found. As there is no sign of the upper landing railing having been interrupted for access to this room, we can assume that the stairway to the room was totally contained within the space of the upper landing.[6]

After the Pennsylvania State government moved out of the building in 1800, the new managers, the Philadelphia County Commissioners, improved conditions for prospective tenants at the old Pennsylvania State House.

To compensate for the darkness of the Central Hall, in 1816 the old north entrance doors were removed and a new pair of doors installed with a large fanlight above.[7] Each of the pair of wide double doors was hung on one-and-one-half pair of strap hinges (Illustrations 30 and 31). They had a large box lock (probably the same one on the doors today), head and foot bolts, and each leaf had a simple door closer mechanism consisting of lines, weights and pullies. The fanlight spanned the width of both doors and helped to light the otherwise very dark Central Hall.[8]

The County Commissioners not only introduced daylight in the Central Hall, but a lighting fixture was hung from the ceiling.[9] Indeed, the entire plaster ceiling was replaced. Crudely made machine-cut lath nails used to attach the present Central Hall plaster ceiling show that both the center rosette and the surrounding ceiling with plaster ribbon border date from the early nineteenth century.[10]

Documentation dated April 1816 reveals that William Thackara, Jr., was plastering in the "Vestibule of State House."[11] The plaster work included:

To one	grand Rosett & Goloichie	$2.50
" 90	Oval beads	0.80
" 132	Spherical do. @ 1 1/2 cts	1.98
" 4	Rosetts (5 inches) 15 cts.....	0.60
	Nails 30 cts.....	5.88

There are 131 spherical and 89 oval beads in the existing ceiling rosette, essentially corresponding to Thackara's bill (see Illustration 29). The term guilloche, refers to a design of bands or strings twisting over each other. Thackara could possibly have been referring to the curling leaf-and-blossom design which surrounds the center raised leaf rosette. In the four corners of the ribbon there are rosettes 5 inches in diameter, just as the work was described.[12] This 1816 plaster ceiling is the oldest ceiling in the building, and is virtually intact except where the ceiling framing was strengthened with steel reinforcement at two cross strips. Every effort should be taken to preserve it.

To complete the renovations of the Central Hall the County Commissioners placed above the Supreme Court Room entrance-way a new open-top scrolled pediment with mask, matching the

eighteenth-century carved pediment above the Assembly Room doorway (Illustration 31). It is possible that there had originally been such a pediment over the north entrance and that it was damaged during the c. 1816 doorway alterations, thus necessitating the copy.[13] In 1898 this c.1816 pediment was moved to above the north entrance (see Illustration 34). In the National Park Service 1968 restoration of that doorway, it was decided to accept the pediment for lack of any more definite evidence.

Sometime between 1820 and 1830 the large built-up stair rail of the Tower Stairhall received a minor change. Smaller side moldings which had once fit in 1/4-inch grooves at the sides of the rail were replaced by larger moldings applied with cut finish nails. The nail characteristics indicate the period of the change.[14]

The next change to the Tower Stairhall came in 1828 when architect William Strickland reconstructed the wooden steeple on the tower with the addition of clock faces in its four exposures. The steeple clock works were powered by weights, the fall of which extended to grade, cutting right through the Tower Stairhall woodwork. The weights fell within wood chutes, built against the east and west walls, north of the windows. The chutes cut through the ceiling cornice and the stairway (Illustration 32). They remained in place and in use until the 1896 restoration.[15]

In 1854, when the second floor of the building underwent its most dramatic change to accommodate the Philadelphia City Council Chambers, the lower portion of the 1750s Lobby

stairway leading to the attic and tower was removed and replaced by a new stair at the Tower Stairhall upper landing (Illustration 32). A new doorway was cut through the upper wall where the new stair landing joined the top part of the 1750s Lobby stair to the steeple and attic (See Illustration 39). This stair was built on a new random width floor atop the original floor boards of the upper landing (Illustration 40). And when built, parts of the original second floor Lobby stair--notably its ballusters, newels and scrolled brackets were incorporated in altered form to meet the steeper pitch.[16]

The main floor of the Central Hall and Tower Stairhall received new flagstone paving about the time of the City Council renovations upstairs.[17] This was perhaps the third pavement laid here. Herringbone pattern bricks covered the floor when the building was first built. These were in use until 1797 (some 67 years), when a second floor of new bricks was laid along with a new front door sill. There had been abortive moves to replace the flooring earlier in 1789 and again in 1793. In 1797 the "Governor authorized the door-keeper to employ workmen to compleat the said pavement taking care not to exeed the estimate."[18] This floor served well into the 19th century when the large sized flagstones were laid (see Illustrations 30 and 31).[19]

The approach of the nation's one-hundredth birthday focused on Independence Hall, and some respectful changes were made prior to 1876. The accumulated paint layers in the Central Hall and the lower reaches of the Tower Stairhall were removed with a combination of burning and acid. The process was

monitored: "You are going on all right scraping off the red [primer] paint, only see that they don't deface or gouge the beautiful mouldings."[20] With the paint removed, the woodwork needed repairs. Some of the original carving apparently needed refastening. And twenty of the small rosettes were restored in the center of the scrolls mounted under the ends of each stair tread.[21]

In the Central Hall two copy tabernacle frames were made and placed on the 1789 west archway partitions opposite the original tabernacle frames. Though missing some of their applied carving these c.1876 copy frames still exist in the INHP Architectural Study Collection, (INDE 5185 and 5186).[22]

For the Centennial celebration all four of the Central Hall tabernacle frames and the two in the Tower Stairhall received brief historical notations beautifully painted in their field panels. The earliest rendering was of gold lettering on matte black with enamel black outlines. After 1896 the color combination was changed to a white ground with gold lettering and red outlines (see Illustrations 34, 35, 38 and 41).[23]

At the bottom of the stairway a very large gaslit glass and sheet metal lamp on a columnar standard had, previous to 1869, been mounted atop the newel post (Illustration 30). This assembly stood some 10 feet high atop the newel.[24] Surface-mounted supply pipes extended up the stairs to a similar fixture at the diagonally opposite newel. The enormous glass-enclosed lamps were replaced just prior to the Centennial with much more delicate candelabrum. The modified fixtures stood at least seven feet atop the stair newels.

The Central Hall received a new chandelier sometime around 1875. Its structure appears to have been of cast metal, with twelve arms in two tiers; it was probably gas lit (Illustration 31).[25]

Sometime before 1876, pipe barriers were erected around the Central Hall pedestal paneling to protect the woodwork and to keep the people now invited into the Hall a safe distance from the cast iron radiators which stood beneath the tabernacle frames nearest the north entrance. Prior to 1869 crowd control had been even less subtle. To close off the second floor a wood picket swinging gate was mounted on the east wall at the bottom of the east wall stair run (Illustration 30). Flanking the Assembly Room door, curved placards at eye level with hands pointing into the room, proclaimed "The Old Liberty Bell." In the southwest corner of the Central Hall and against the northwest corner of the Tower Stairhall another set of beautifully lettered signs said "Loitering and Lounging about these premises Positively Prohibited." It is understandable why some loitering took place; in 1868 Mrs. Mary Gould was permitted "to occupy [a] refreshment stand in the passage-way..."[26]

The Centennial Bell, which now hangs in the cupola of the steeple, was so large that, after entering the building through the wide 1816 north double doors, it was necessary to temporarily cut away the lower paneled jambs of the archway between the Central Hall and Stairhall. These cuts can be seen today, the paneling artfully reconstituted below them.

In raising this 13000-lb. bell just before July 4, 1876, the

tower itself became the scaffolding. Planned for this, the tower floors were framed with square center openings. Each time a bell was raised or lowered the flooring, plaster ceilings and joists within these openings were removed. Block and tackle reduced the effective weight of the bells in hoisting them to their hanging place in the steeple.[27]

After the Centennial Bell was in place the Tower Stairhall ceiling was repaired and embellished with a decorative rosette.[28] No documentation exists to indicate that the rosette was for a chandelier. Indeed, photographs taken in 1896 show, hung from the center of the rosette, the chain which had suspended the Liberty Bell after the Centennial.[29] The plaster ceiling rosette has since been modified and the National Park Service, in its 1963 structural rehabilitation of the tower, preserved the rosette (in part because of its association with the Centennial), despite the fact that we have no evidence that there was a rosette there in the eighteenth century.[30]

Documentation suggests that as part of the Centennial refurbishment the Tower Stairhall wood interior windowsills had an extra layer of wood applied, probably to cover the worn original surface.[31] This extra layer has since been removed and the original sills restored by the National Park Service.

At some time in the nineteenth century a second closet was created under the main stairway eastern flight. The door to this closet appears in an 1896 photograph (INHP negative 1633) immediately north of the original closet door. The 1898 restoration of the stair spandrel paneling took with it

evidence which might have explained the need for this second door, but part of its interior rough frame survives (INHP negative 157.2144).

Surely much worn by 1875, the original south exterior doors were removed and replaced "like the original" in preparation for the Centennial. Yet it wasn't until 1896-98 that the c. 1816 north entrance with fanlight was removed and the entrance restored with paneled doors that approximated the missing originals.[32]

The 1896-98 restoration was done under the direction of Philadelphia architect T. Mellon Rogers, in the employ of the City of Philadelphia and with the surveillance of the Bureau of City Property and the Director of the Historical Society of Pennsylvania. The Daughters of the American Revolution funded the work.[33] Rogers perpetrated many undocumented "restorations" and caused the removal of considerable original fabric in the second floor, Supreme Court Room, and Assembly Room. But in the Central Hall and Tower Stairhall, Rogers did rather well with his restorations. As stated above, Rogers came close with his design for the front entrance restoration. He opened the blocked-off archways to the Supreme Court Room, (see Illustration 33), moved the c. 1816 open scrolled pediment to the newly restored north entrance (see Illustration 34), and put the 1876 copy tabernacle frames in storage. In the Tower Stairhall he took apart the main stair to replace its treads and risers, and restored the spandrel paneling with only one closet door. The 1875 candelabra were removed, the tops of the stair rail newels thus once again

were open to view, and the bottom newel was given an ivory button at its apex (see Illustration 37).[34]

T. M. Rogers further "restored" the Tower Stairhall by removing the two clock weight chutes and replacing the woodwork they had displaced. He added a new layer of flooring over the original boards at the upper stair landing (see Illustration 40), removed a closet beneath the attic stairs at this same landing, closed in the archway to the second floor Lobby with a Gothic fanlight above double doors (see Illustration 39), and had composition replacements made where elements of carving were missing.[35] These carved replacements were not accurate in form and were easily identified by the National Park Service (see further discussion below).

Rogers replaced the paneled jambs of the Venetian window in the Tower Stairhall. The wide jamb boards with their applied moldings are of different woods than the adjacent original woodwork, and the work is applied with wire nails of this late nineteenth century period.[36]

In addition to the woodwork restoration, Rogers added a white coat of plaster to all the Tower Stairhall walls, removed the flagstone paving and laid, at the same high level, a new brick floor in a bed of sand (no doubt suggested by the original paving bricks which survived under the Central Hall pedestal woodwork). The sand bedding was criticized some twenty years later with the result that the brick flooring was relaid in cement.[37] Rogers also screened out daylight by adding green venetian blinds to the windows.[38]

The plaster walls of the Stairhall after 1898 displayed the larger canvases of the City's collection of portraits, recalling the image of a great English Georgian house.[39]

The heavy portrait frames were attached to the walls with large iron hooks let into the masonry during Rogers' restoration. The National Park Service has now removed the hooks and moved the portraits from the Tower Stairhall for display in the Second Bank of the United States. There is no known historic basis for the display of paintings on these walls.

Early Twentieth Century Alterations

Though strictly temporary the alteration with the most effect was made in honor of General Pershing's visit to Independence Hall in September 1919. Reminiscent of a flower show, the building was decorated with potted palms and lemon trees. Dangling leafed branches covered every architectural feature, and oriental rugs softened the General's path. Bare light bulbs hung from knob and tube wiring strung from the Central Hall through to the south stair landing (Illustration 36).

In 1920, along with the Philadelphia Chapter of the American Institute of Architects' restoration of the second floor, large bronze electrified chandeliers were hung in the second-floor rooms and one in the Central Hall. To match these, very tall heavy electrified bronze "torchères" were made for the hallways (see Illustration 41). These chandeliers and freestanding lighting fixtures remained in

place until the National Park Service restorations removed them for less conspicuous portable fixtures.

By 1924, the waist-level panels of the 1876 south doors were removed and replaced with plate glass to provide views of the Liberty Bell for after-hours visitors.[40] These glass panels have recently been restored to solid wood panels now that the Liberty Bell is housed in its own structure of glass one block away.

NATIONAL PARK SERVICE RESTORATIONS 1950s-60s

The National Park Service restorations of the Central Hall and Tower Stairhall were part of the overall aim to restore and interpret the building to its appearance during the historic period 1776-1800. The needs were thus twofold: restore the appearance and ready the building's structure for anticipated heavy visitation. The following discussion will describe what the National Park Service did in these spaces and what additional interesting artifacts and information turned up during the process.

In 1951 slip-in treads were devised for the main stair to facilitate replacement (see Illustrations 42 and 43).[1] At this writing these treads are still in place, although it will not be long before they will need renewal. There are pros and cons with this system. Many of the surrounding "permanent" treads have cracked and will need replacement as well as the slip-in pieces.[2]

In 1967 the entire staircase was reinforced with steel. This included polyester castings with embedded steel rods made to replace two balusters in each flight of the stair rail. All of the steel members connect to form a stable structure.[3] The original balusters from which the castings were made have been catalogued into the INHP Architectural Study Collection (INHP 6485 A-H). The flooring at the upper stair landing was found to be original (see Illustration 40). Two boards were temporarily lifted in 1964. All the flooring still had its original hand-wrought nails.[4] As this is the <u>only</u> surviving

original flooring in situ in the Independence Square buildings, vigilance is essential here to assure its preservation. Presently rubber matting protects it from today's constant and heavy traffic.

While researching the original levels of the Central Hall, Tower Stairhall, Assembly and Supreme Court Room floors, as well as the north and south entrance sills, it was found that all the original first floor levels were lower than the door sills by about 3" to 5". The Historic Structures Report Part II, Independence Hall Paving in the Central Hall and Tower Stairhall, ably presented by Historical Architect Lee H. Nelson in 1966, gives a very detailed background of the evidence found of this lower floor level. In the hallways the restored lowered floor is of large handmade paving bricks (2 1/8" - 2 1/4" by 4"- 4 1/4" by 8 1/2" - 8 3/4") laid in herringbone pattern to match those remaining under the Central Hall pedestals.[5] The original baseboards of both hallways were badly deteriorated along their lower edges and have been replaced with new material. Instead of being nailed up underneath the upper woodwork for storage as the report recommended, the original baseboards were salvaged and accessioned into the Architectural Study Collection, and have been put in storage along with other Independence Hall artifacts in a large closet built in the building's tower.[6]

Lowering the floor level yet reconstructing the original door sills at the main entrances brought about an unusual condition for twentieth century users. The door sill is about 6 inches higher than the floor level. One must step down upon

entering. To accommodate the unsuspecting public (and help prevent accidents), wood framed ramps have been built just inside the door sills.

Certainly the greatest visual impact on these hallways has been the National Park Service change in paint color. This took place so long ago that the impact of the change is lost on today's visitors. To recap, the change in appearance was from woodwork painted with glossy white enamel in the first half of the twentieth century to a hiatus with bare woodwork in the late 1950s and then in the National Park Service restoration of 1960 the so-called stone color (Munsell No. 2.5Y 7/2) in the Central Hall and a blue color in the Tower Stairhall. The Historic Structures Report Part III, Independence Hall Repainting of Interior: Entrance Hall and Tower Stairhall was written to present the physical and documentary evidence in support of the color changes. Since the writing of this report took place very early in the Independence Hall research program, re-evaluations and new evidence eventually modified the results. The blue color of the Tower Stairhall was modified several times from the Munsell Color 2.5B 6/2 to 5B 6/2. The report said that the washboards should not be struck out in dark paint, but subsequent research showed indeed the Central Hall bases were painted dark red brown (Munsell No. 7.5 R 3/4) and the Tower Stairhall baseboards were painted black. As the evidence for color interpretation and distribution is voluminous and complicated, this subject of paint colors for the Central Hall and Tower Stairhall will be treated in a separate report.

One item, however, should be emphasized here. For the sake of future verification a section of the Tower Stairhall cornice, on the south wall near the southeast corner, has been left with all its paint layering intact.[7]

While the paint was off the woodwork, many Historic American Buildings Survey photographs were made of the bare woodwork. These photographs, filed at the Library of Congress, provide a good record of the parts which make up the whole, and show the carving almost as it was when new (Illustrations 21, and 23-28).

The removal of paint layers from the Tower Stairhall and Central Hall woodwork provided the opportunity to inspect the age and condition of the woodwork. As said before, all the 1896-98 "composition" substitutions for carvings were readily spotted. Behind these, on the board walls, the profiles of the original carving guided more accurate replacements. In one instance, at the second-floor archway to the Lobby, the bellflowers were completely replaced in both open pilasters.[8] The new carvings throughout these two rooms and all of the paneling repairs were artfully done by Independence Park's master carpenter Joseph Silberholz (see Illustrations 48-50). Trained in the Ukraine, Silberholz took great pride in his ability and in the honor of working on this woodwork. As he probed behind the paneling, his observations on construction methods and/or structural problems served us all in understanding the building's history.[9]

One interesting item uncovered was a section of a nineteenth century iron lightning rod, found in the northwest

corner of the Tower Stairhall behind the first floor dado paneling and embedded in the plaster above the dado paneling.[10] Other artifacts among plaster fragments and other debris, hidden behind the woodwork, included a bear's claw, two swagger sticks (one with a monkey's head),[11] fruit pits, lunch bones, and ticket stubs to Peale's Museum.[12] Of particular interest to the history of the Peale Museum, a large mound of glass "wasters" showed up under the bottom stair landing in the NE corner of the Stairhall. Moses Williams (C. W. Peale's black assistant) while cutting the glass covers for the many silhouettes he made of Museum visitors apparently discarded the waste pieces of glass in this out-of-the-way dark hole.[13]

Some pieces of the original woodwork have been catalogued into the Museum Collection and therefore have not been returned to their original positions. For its value as an exhibition piece demonstrating the quality of Samuel Harding's carving, one of the Tower Stairhall cornice modillions, with its paint carefully removed, is now catalogued, number INDE-1267. The modillion has been displayed in several exhibits at Independence Park and the Philadelphia Museum of Art. As stated earlier, to strengthen the stair rail, two balusters from each long railing were removed and catalogued and were replaced by steel reinforced polyester cast copies. Other pieces have been catalogued because they contain vital evidence. A Tower Stairhall cornice flower (INDE-1271), for instance, and a soffit panel (INDE-1273), are valued for their paint evidence. All of these items have been replaced with

copies.

While working on the restoration of the Guard Room in the Tower Stairhall southwest corner, its door was found to have its original HL hinges. The knuckles had worn so badly that it was determined to remove the originals for safekeeping (INDE-7016), and the door was hung anew with reproduction hinges. At the south exterior double doors the large 1875 HL hinges had long ago been rotated to extend their useful life. They, too, were removed and catalogued (INDE-3416) in 1982. Their replacements are ball bearing brass butt hinges with simulated straps. These south doors and the NPS restoration north doors have too much use to be hung from any less rugged hinge type.[14]

The Guard Room was stripped of its later board linings and returned to its eighteenth century simplicity: stone outer walls and the unpainted back sides of the enclosing original paneling. It was hoped that the Guard Room could be furnished with an antique stove, chair, hanging lanterns and guard coat, etc., and left open for the visitors to see. Instead, it seems necessary to use the closet to store twentieth century ladders, extra chairs, supplemental lighting fixtures and extension chords. The closet opposite, under the east stairs, was outfitted for the use of the interpretive and custodial staff. The walls were lined in plastic laminate panels and the floor laid with terra cotta tiles. Electric panels, a utility sink, counter top sink, cabinets for coats and brochures, and emergency telephones were installed.

A study of lighting the Central Hall and Tower Stairhall was

made (Historic Structures Report Part II, Supplement I, Independence Hall Lighting INHP, Sept. 1966). Documentation for lighting fixtures having been used here in the eighteenth century has not been found. Possibilities for hanging lanterns were suggested by some physical evidence, but the lack of strong belief in this evidence dampened enthusiasm for installing the fixtures. Candle wall sconces (non-electric) were mounted by the INHP museum curators on the side walls of the Tower Stairhall and on the west wall of the second-floor Lobby, although for fire safety they are not used.

As so much of the Tower Stairhall wall area is window, we should address the question of how much of this glass is old. Actually, without examining the thickness of each light (window-pane) it is hard to say what age the glass is. Early glass tends to be thinner. Early glass also, however, betrays the process of its manufacture. In the case of Independence Hall the original glass was probably mostly crown glass.[15] Thus the lights should have concentric ridges distorting the light waves passing through them. Many of the lights in the upper sash of the Venetian window appear to have these characteristics. These may have survived because the upper sash is fixed and would have had less handling over the years. The rest of the glass looks to be of later replacement using the glass available at the time.

Daily wear and tear on the fabric of the Central Hall and Tower Stairhall takes its toll. The crowd control ropes attached between the archway jambs have caused depressions in the original paneling where the hooks on the ends of heavy

ropes abraded the surface. The heavy rope with a hook on the end, when dropped by mistake, chipped the brick flooring, leaving rough concave depressions in the bricks. Changing the type of ropes to ones less heavy with fabric loops at the ends, and having the hooks fixed on the wall has stopped this wear.

As time goes on the high annual visitation will slowly wear away the restoration brick paving. When these restoration bricks were ordered a second set was purchased as well. These are stockpiled in the cellar under the Supreme Court Room and await their use in replacing worn areas of the floor some forty years from now.

Extra lengths of southern yellow pine flooring have also been ordered for stockpiling. Although rubber matting has been introduced on the stair landings (most important at the top landing where there is original in situ flooring), this wood will be available when the stair treads must be renewed.

To cut down on the wear and tear on the building, a wise decision was made prior to 1976. On New Year's Eve of that Bicentennial year the Liberty Bell was moved out of Independence Hall to its own display building. For most of the nineteenth century the Bell had been displayed in the Assembly Room and it was hung in the Tower Stairhall from a thirteen-link chain in the center of the ceiling. From c. 1900-1976 the Bell was hung from a specially made frame that stood, for the most part, in the center of the Tower Stairhall first-floor level.[16] The space around this frame soon became too small for the ever growing number of visitors.

It was impossible to keep the people from rubbing the nearby woodwork or, even worse, from putting their feet up against it as they stood listening to the interpretation of the Bell. Moving the Bell out of the building was the best answer to prevent further damage to the woodwork.

Wear of the woodwork occurs wherever spaces are tight, particularly at the entrance to the Assembly Room. Here we have experimented with using epoxy paint to resist abrasion. In time, of course, even this coating wears off. The only answer is to frequently touch up the painted woodwork most susceptible to wear. Thus the paint should be locally renewed before the woodwork itself can be worn away. Indeed, the term "touch up" refers to painting in just the worn area, doing so in an artful way by mixing colors which blend in with the surrounding paint. As paint surfaces accumulate dirt, the craftsman must "dirty" his touch up paint.

It is essential that such worn areas do not become the excuse for repainting the entire doorway or the entire room. The National Park Service in 1956 removed some 40 coats of paint (40-50 mils thick) at the Tower Stairhall.[17] This thickness obscured the carving (see Illustrations 42, 45-47).

It took a year and one half to remove the paint of the Central Hall and Tower Stairhall. Pressure on the men to speed up their work caused improper scraping and damage resulted particularly on the original carving. If one remembers that this building should be preserved for perpetuity, all effort should be made to prevent paint build-up and the need to again remove the paint.[18]

The way to avoid repainting is to routinely touch up worn areas, but also to frequently dust and wipe down the woodwork with clean damp rags. At least once a year the upper reaches of the rooms should be vacuumed and the surfaces with more stubborn dirt deposits should be washed.

This goal has not yet been achieved by the National Park Service. We have avoided total repainting of woodwork. We have done some touch up and high reach cleaning, but a routine system has not yet been established.

The most recent National Park Service action in the Central Hall and Tower Stairhall was to record the architecture, along with that of the rest of the building, by the most accurate system available, stereophotogrammetry. Since 1918 everyone has relied on the measured drawings of Independence Hall made by the Philadelphia Chapter of the American Institute of Architects. Able as these 1918 drawings are, they do not attempt to record the sags, the skewness, or the subtle dimensional and detail variations in the building. Now, through the Historic American Building Survey files in the Library of Congress, the general public will be able to obtain copies of the new highly accurate record drawings. Illustrations 8-14, 16 and 17 are based on this good work.[19]

AUTHOR'S RECOMMENDATIONS FOR FURTHER ARCHITECTURAL RESEARCH IN THE CENTER HALL AND TOWER STAIRHALL

1. Remove narrow strips of the plaster at the stairhall north wall to find location of pre-1750 window opening above south entrance of the State House. Determine whether or not it might have been a window-door which led out onto a balcony, as possibly indicated in Edmund Woolley's account of 1750-57 "Work done at the State House" (Norris Papers, HSP), where he says: "altering the Balconey & adding thereto with Stairs leading to State House flat" (Illustrations 4 and 4a).

2. Determine the original appearance of the Palladian window jambs as the present ones appear to date from the 1896-98 work of T. Mellon Rogers.

3. Verify that the large handrail dates from 1755.

4. Remove the plaster skin coat on the walls to expose any possible surviving wall paint colors, lighting fixture locations, and the position of Charles Willson Peale's "Lobby" which was built high against the north and east Tower Stairhall walls.

5. Re-examine the paint color evidence for the wood trim and plaster walls to be sure we have interpreted the color correctly in terms of hue, chroma and value.

6. Re-examine the open-top scrolled pediment over the Assembly Room Door. Remove it and relate its nail holes to

those in the 1750s wall paneling to see if an extra set in the pediment shows it once hung at a different location such as above the 1732-1750 south door to the exterior.

NOTES

PREFACE (pp. 3-6)

1. Historic Structures Report, Part II, Independence Hall, Chapter II, INHP, April 1962, is the last and most complete of the historians' reports. (It is hereafter referred to as HSR Independence Hall.) INHP historian David A. Kimball in 1988-9 assembled Appendix I of the primary documents on which this report was based. Because of its size this compendium will be kept in the reference and archive sections of the INHP library.

2. The first NPS Resident Architect at Independence Park was Charles E. Peterson (1949-54). The second was Charles S. Grossman (1954-1958). Peterson, under the Eastern Office of Design and Construction, was then in charge of the restorations 1958-1962, followed by Lee H. Nelson until 1972 under EODC and its bureaucratic descendents. What remains of their papers are now filed in the INHP archives.

3. Most of the references to historical data in this report can be found in the Independence National Historical Park (INHP) history card file. This file was gathered principally by the INHP historians over a thirty year period. Needless to say, the file is the backbone of all that is known about the park buildings.

There are three photographic collections in the INHP library. They are referred to with the following prefixes: INHP; CN denoting an old City negative number; and 157 which designates the historic architects' photograph collection.

The drawings referred to have either the prefix NHP-IND or 391; both are designations for INHP drawings. The original drawings are filed c/o NPS, Denver Service Center. Half size copies and microfilm copies are at the INHP Historic Architects Office.

NOTES

BUILDING THE PENNSYLVANIA STATE HOUSE (pp. 8-14)

1. A brick inscribed "Nicholson 1731" was found in an original wall (in 1854), showing materials were ordered in that year (see HSR Independence Hall, pp 8-10, End Note 14). Structural Engineer Nicholas Gianopulos of Keast & Hood Co. remembers from excavations that the bottoms of the stone foundations were about two feet below the present cellar floor level. Interview Nov. 6, 1984.

In the December 9, 1854 Public Ledger, it was reported that the cellar under the Court Room was being dug out, implying that there had not been a full cellar originally. We believe the reporter was in error. In 1854 they were excavating for the vaulted connection between the cellars, and, in preparation for paving the cellar floor some additional dirt may have been excavated. The physical evidence leaves no doubt that the west cellar was originally fully excavated; and it was lighted by the three original north cellar windows and accessed by a bulkhead with a three-foot-wide opening, centered under the Court Room southwest window.

2. In the northwest corner of the Central Hall a brick-lined water well was found. Its presence and the report of the archeologist establish two points: the earth below the Central Hall is indeed unexcavated natural soil with a humus layer still there; the well probably belonged to David Powell, a surveyor yeoman who owned a lot 49 1/2 x 255 feet at this location, and who may have built a house here c. 1690-96. See Charles I. Wilson, Jr. "The Well in the Entrance Hall," Dec. 1967, INHP Museum Acc. 2293.

3. The framing design is well explained in an article written by Lee H. Nelson entitled "Independence Hall: Its Fabric Reinforced," in Charles E. Peterson, ed., Building Early America, (Philadelphia: The Carpenters' Company of Philadelphia, 1976 pp. 279-297.

4. Samuel Hazard, ed., The Register of Pennsylvania, hereafter cited as Hazard's Register, vol. II, p. 376.

5. Pennsylvania Archives Series VIII, vol. III, pp. 2213-4, January, 1734. This reference is a remonstrance of the building Superintendent Andrew Hamilton in which he recaps the arduousness of his work.

6. Ibid., pp. 2171-2.

7. Ibid., pp. 2298-9.

8. Ibid., pp. 2337.

9. Ibid., p. 2689. See HSR Part II (Portion) Architectural Data Section on Independence Hall Assembly Room, INHP. Lee H. Nelson, July 1964.

10. Ibid., pp. 2682-3.

11. Ibid., p. 2687.

12. Ibid., p. 2690.

13. Pennsylvania Archives Series VIII, vol. IV, p. 2868.

14. Ibid., p. 2909.

15. Colonial Records, vol. IV, p. 744.

16. Pennsylvania Archives, Series VIII, vol. IV, p. 3081.

17. Colonial Records, vol. V, p. 69.

18. PA Archives, Series VIII, vol. IV, p. 3491 and Hazard's Register, vol. 1, p. 222, where it is indicated that glass was wanting and the room "near finished" in March 1753.

19. HSR Independence Hall, Section 1, p. 50. The INHP historians state that William Leach was painting as late as 1759. However, this is when he was finally paid. On the reverse side of the order to pay William Leach is the statement: "William Leach 32.0.0. for painting at State House Nov. 3, 1756..." (Loan Office Accounts, 1759-1766, Norris Papers, HSP, Nov. 1750).

20. Sir John Summerson in his book Architecture in Britain 1520-1830 (London: Penguin Books Ltd., 1955), in the chapter "English Architecture in America" says of the exterior: "The Pennsylvania State House (Independence Hall) at Philadelphia (1729-34) represents the prevailing style for such buildings -- a Palladianism totally lacking in scholarship and virtuous only by a combination of chance and instinct" (p.325). More will be said about the exterior of this building in a separate report yet to be written.

21. Pennsylvania Magazine of History and Biography, Historical Society of Pennsylvania (hereafter cited as HSP), 23:4 (1899): 417-19; a description of the building in 1774.

NOTES

THE DIVISION OF RESPONSIBILITIES IN DESIGNING AND BUILDING THE PENNSYLVANIA STATE HOUSE (pp. 15-21)

1. Roger W. Moss, Jr. "The Origins of the Carpenters' Company of Philadelphia," in Charles E. Peterson, ed., Building Early America (Philadelphia: The Carpenters' Company of Philadelphia, 1976) pp. 35-53.

2. HSR Independence Hall, Section 1, gives a full description of the background for the need of the building and the ensuing struggle to build it.

3. Pennsylvania Archives, Series VIII, Vol. III, pp. 2213-4. Andrew Hamilton presented to the Assembly a "Remonstrance" where he outlined his actions "in building a House for the Assembly": "in doing of which he hath not only undergone a great Deal of Trouble and Fatigue; but hath sustained very great loss in his Business..." "...a Piece of Ground ...was purchased...a Plan and Elevation of a House ...was compared with several other...the Plan and Elevation of the Building now erected ...was not only agreed upon as the least expensive, but also as the most neat and commodious...[and was] approved ... proceeded to purchase Materials, ...carried on the principal Building, with the offices, ...being obliged almost to a constant Attendance in providing Necessities for the Building, and in overseeing the Doing the work."

4. Ibid., p. 2245. Edmund Woolley petitioned the Assembly that they should clarify "the Species of Work which they were to perform at the Rate of Thirty Shillings per Square..."

5. Ibid., Series VIII, vol. III, p. 2337.

6. Carpenter, John Harrison, who was hired "to do the Inside Work of the State-house...[asked] the House [to] order a Survey ...be made of his work, and allow him what shall be reasonable for the same..." Ibid., p. 2689.

7. The NPS historical architects found evidence of this garret stairway having been at the west end of the southeast room, going northward as it ascended. See drawing 391/94000, sheet 31, and 31A, note 2.

8. HSR Independence Hall, Section 1, pp. 12-13.

9. The NPS historians believed that the drawing showing only the first and second floor plans (Illustration 2 in this report) was part of this set of drawings made by Woolley for John Penn. It was that this drawing was found among the Penn papers which lead them to this conclusion. HSR Independence Hall, Section 1, p. 12. As this chapter proceeds it will be explained why this author does not agree with the historians' viewpoint.

10. Pennsylvania Archives, Series VIII, vol. III, p. 2337.

11. The Oxford English Dictionary, Oxford University Press, January 1981, gives the history of the usage of these words: "Draft...A plan, sketch, or drawing esp. of a work to be executed...More usually Draught..." 1727-51 Chambers Cycl. Draught or, as it is pronounced, Draft, in architecture, the figure of an intended building described in paper." pp. 795-6.

The hair-raising story of the survival, and destruction, of the Penn papers is well told by Nicholas B. Wainwright in an article "The Penn Collection," The Pennsylvania Magazine of History and Biography, HSP, 1963, p. 393.

NOTES

CENTRAL HALL PRE-1750s (pp. 23-28)

1. The 1750s date for the present Central Hall paneling is best corroborated by the Samuel Harding bill for carving 1753-1756, Norris Papers, Historical Society of Pennsylvania. This bill provided a check-list for all the carving done. It was first studied by the National Park Service in 1954 by Historical Architect Robert G. Stewart under the leadership of Charles E. Peterson, Resident Architect at Independence National Historical Park.

2. The paint covering was thick despite the 1876 paint removal in preparation for the Centennial celebration. See "Nineteenth Century Alterations" of this report. See the Central Hall manuscript Logbook 1955-1983, entries for Dec. 5-6, 1957. This log was kept largely by Historical Architect Penelope Hartshorne, and is hereafter referred to as CH Log. (A Tower Stairhall Log was also kept by Hartshorne and will be cited later.) All the Logs have been microfilmed by the American Philosophical Society Library. The originals are held by the INHP Historical Architect, or have been placed in the INHP archive.

3. The Central Hall brick masonry partitions, however, were apparently built just after the outside walls as their half arches tied into pockets cut into the main walls for four inches of bearing. CH Log, Feb. 11, 1957.

4. Lee H. Nelson, Historic Structures Report, Part II, Architectural Data, Independence Hall, Paving in the Central Hall and Tower Stairhall and Related Exterior Doorways, Sills, Steps and Paving, Feb. 1966 (hereafter HSR Paving).

5. See CH Log, Dec. 17-18, 1956. The original flooring was discovered first at this time, but full treatment of the evidence did not take place for ten years. See HSR Paving.

6. CH Log, June 1956, see NPS drawing NHP-IND 2462, and INHP negatives 3552 and 3978 for this evidence.

7. See INHP negative 3549.

8. Drawing NHP-IND 2658 records the evidence along with photographs INHP 3374 A & B. INHP negatives 157.1753 & 1754 show that when the triangular pediment was in use it was painted with only the first and second prime coats of red iron oxide and a thin oil and white lead undercoat. See CH Log, April 25, 1960.

9. When the 1750s paneling was added and the 1733 south door eliminated, the south open-top scrolled pediment could have been moved above the Assembly Room door. Indeed, when the NPS removed this pediment, in 1957, its back had "many more nail

holes than nails" showing possibly that the pediment was moved to this location from a previous use elsewhere. See CH Log Jan. 2, 1957 and Recommendations for Further Research.

10. See HSR Paving, Illustration No. 7, negative 157.1949.

11. We have not as yet looked for evidence of such a window but it is likely to be there; such windows lighting stairways in center halls are commonly found in early eighteenth century buildings in the Delaware Valley.

12. Evidence for both of these sets of windows was recorded on the following drawings: the north windows, NHP-IND 3425 sheet 20, and 3441; the south windows, NHP-IND 2462 and 3404.

13. See CH Log June-July 1956 and Drawing NHP-IND 2462 and 3535-1-2, where 7ft.- 6 inches high vertical board partitions were discovered in these locations.

14. See photographs INHP 4442 and 5929. See CH Log, Nov. 30, 1956. See note on Drawing 391/94000, sheet 26.

NOTES

1750s COMPLETION OF THE STATE HOUSE (pp. 29-30)

1. See W. Birch & Son, Phila., engraving, "Back of the State House, Philadelphia" (1798-99). Twenty years later another landscape feature and symbol of affluence was added. An oversize fanlight and pedimented frontispiece with twenty-foot-high paneled doors became the gateway to the State House yard. See Birch's view "State House Garden, Philadelphia."

2. See HSR Paving; Penelope Hartshorne, Historic Structures Report, Part II, Architectural Data, Independence Hall, Repainting of Interior: Entrance Hall and Tower Stairhall, Nov. 1960.

NOTES

ARCHITECTURAL DESCRIPTION OF THE 1750s
CENTRAL HALL AND TOWER STAIRHALL (pp. 31-43)

1. Travels in North America in the Years 1780, 1781, and 1782 by the Marquis de Chastellux, Howard C. Rice, ed. & trans., Chapel Hill, 1963, 1, 143, entry for Dec. 4, 1780.

2. Philadelphia eighteenth century insurance surveys list open newel stairs as opposed to doglegged or winding stairs. According to Joseph Moxon's Mechanick Exercises, London, 1703, an open newel stair differs from others in that the stair turns about an open space which allows light from above to reach each run. Open newel stairs were usually more elaborate to keep pace with the greater floor area they commanded. These expensive stairs usually had: an open string where the tread ends were covered with nosings and "supported" with decorative brackets; ramped hand rails and half rails against the wall; turned newels and balusters; engaged pilasters echoing the newels; and, if very elaborate, dado paneling lined the wall between the pilasters.

3. The year 1739 is when the Library Company deposited their books in the west wing second floor, where they stayed until 1773: see Edward M. Riley "The Independence Hall Group" in Historic Philadelphia (Philadelphia: American Philosophical Society, 1953, p.15.

4. Edmund Woolley will, Will Book P. (1760), p.152, Office of Register of Wills, Philadelphia City Hall.

5. As the title page is missing from this copy no edition number or date is available. (A copy is in the INHP Historical Architects' Office.) The date of the first edition is not known. The second edition was 1724, third, 1730, and fifth, 1736.

An Isaac Coats in 1772 owned two houses on Second St. between Sassafras [Race] and Vine (Contributionship, Book 2, Survey 1559, p.63). An Isaac Coates in 1785 Francis White Philadelphia Directory, was a brush maker at New Market between Callowhill and Vine. The Isaac Coats who purchased Woolley's books may have been related to the Quaker families: Coats who were brickmakers, or Coates who were of fame in the medical field Penna. Mag. of Hist. and Biography, HSP.

6. State Archives, RB 720 G3456 1739, Harrisburg, Pa. According to the Rare Book Room Librarian Barbara Deibler (interview January 9, 1990), all the books in the Pennsylvania State Library collection which were owned by the provincial government in 1767 were stamped in gold on their front cover "ASSEMBLY OF PENNSYLVANIA." James Gibbs Book of Architecture ... was so marked. An examination of its pages show that it must have been referred to with great respect, if at all, as all the pages are very clean and whole. There were two brief

penciled calculations and a penciled "B B" in a cartouche; none of which were on plates related to the architecture of the State House.

7. These books are listed in the Catalogue of the Miscellaneous Books Belonging to the State Library of Pennsylvania [sic], Harrisburgh: Printed by John Wyeth, 1818., American Philosophical Society; INHP microfilm.

Others have explored the subject of design sources for the State House. Fiske Kimball wrote to the architect for the Independence Hall second floor restoration, Horace Wells Sellers, on February 19, 1923, "... Swan's `British Architect or Treasury of Stair-Cases'... appeared in 1745 ...showed stair-cases with similar details..." On February 23 Sellers answered "...it is more than likely that master builder Wooley ... and the superintendents ... had this book before them ... there is ... a fascination in recreating in one's mind the genesis of the design ... (Horace Wells Sellers Collection, INHP cat. 4301, folder 15). See also: Virginia W. Cute, "Edmund Woolley 1695-1711," term paper (History of Art 720), University of Pennsylvania, 1962 (now in the INHP architectural files); and see early composite photographs made of the Gibbs baroque pediments related to the Central Hall pediments, probably made by NPS Historical Architect Charles E. Peterson and/or his assistant Robert G. Stewart (INHP photograph file).

8. Note, Lee H. Nelson to Penelope Hartshorne Batcheler, March-April 1988.

NOTES

INSTALLATION OF THE CENTRAL HALL WOODWORK AND CONSTRUCTION OF THE TOWER STAIRHALL (pp. 43-52)

1. INHP photo negative 3337.

2. See L. H. Nelson's Logbook, Vol. 1, "Project Supervisor for the Structural Rehabilitation of Independence Hall July '61-Jan. '63," entry for Friday, Jan. 19, 1962.

3. Norris Papers, HSP, INHP photostat 1024. Samuel Harding's account for "Carved Work Done for the State House" starts Jan. 29, 1753 and ends with a summary written Jan. 7, 1756. The characteristics of Harding's signature show that he did not write the account itself. Indeed, his signatures (on a page not included with Illustrations 5 & 6 of this report) for the installment payments vary considerably, showing possible failing health evident on December 30, 1757, a regain of strength in April 1758, only to fail again by July 1758. In June of 1758 his will said he was "indisposed in Body, but ...of sound ... Mind and Memory ..." Apparently he died by September of that year, leaving his house at 104 Kenilworth Street, Philadelphia (purchased in 1754) to "the Son of my kind and esteemed Friend Elizabeth Downey of Wiccacoe." (Documentation courtesy of the Philadelphia Historical Commission). As of 1989 Samuel Harding's house still stands, although it has undoubtedly been modernized over the years by the many subsequent owners. This is where he lived during the years he created the great carvings of Independence Hall's Central Hall and Tower Stairhall, Steeple and Great Clock.

4. Bryan Wilkinson's carving bill was found among the Provincial Council Receipts of the Comm. of the State on Public Accounts 1769-1776, MSS, State Records Office, Harrisburg, August 20, 1756. The open scrolled pediment over the north entrance apparently dates from 1816. It may have been a copy of an original which was damaged at that time. See Lee H. Nelson and Penelope Hartshorne, Independence Hall, The Front Entrance, The Tower Entrance and the Guard Room, July 1967, p. 22 (hereafter HSR Front Entrance).

5. As the carpenter George Alexander who wrote some of the graffiti on the Central Hall woodwork was not hired by Edmund Woolley until January 1755, the Central Hall Woodwork was indeed the last of the interior projects. Edmund Woolley Account, Norris Papers, HSP.

6. Structural Engineer Nicholas Gianopulus estimates that these tower foundations would have been at least as deep as those of the main building. Interview Nov. 6, 1984.

Soon after the walls were erected a vertical crack apparently developed at the weak point of the south wall between the large window openings. Gianopulos confirms that this is a result of expansion and contraction. It will always

be there and must be kept caulked. See HSR Independence Hall Historical Data, Section 1, p.95, and Hazard's Register, Vol. I, No.10, pp. 152-154 for an early nineteenth century reference to the crack.

7. See CH Log, April 25, 1957. The window which probably existed 1730-1750 above the south entrance was most likely altered in some way to create the existing large archway at the second floor landing.

8. For a description of the stairway framing see Lee H. Nelson and Joseph Petrak, Historic Structures Report, Part II, Architectural Data, Independence Hall, Rehabilitation of Tower Stairway, Tower Exterior and Steeple, 1965.

9. See CH Log, March 18, 1960, drawing NHP-IND 2566, and INHP Museum Accessions 2383-89 and INHP negative 3337, and 157.831.

10. See INHP negative 3977 and other photographs taken of the repair of the paneling.

11. See INHP negative 3506 and the evidence drawings of the bare walls in the Assembly Room NHP-IND 3404, and second floor NHP-IND 391/94000.

12. See drawing NHP-IND 2566, Illustration 7.

13. See INHP negative 3718.

14. See INHP negative 3344-B.

15. See INHP negative 3968.

16. See INHP negative 4257-B.

17. See Historic Structures photograph 157.1959 (in INHP Library). These pieces are now catalogued (INDE-1258) in the INHP collection and are stored with all the Independence Hall artifacts at the tower level immediately above the Tower Stairhall.

18. See CH Log, May 31,1956 and Tower Stairhall Log, (hereafter cited as TSH Log) Aug. 12, 1957.

19. Illustrations of this carved work can be seen in Early English Churches in America 1607-1807, Stephen P. Dorsey, Oxford University Press, 1952.

NOTES

ALTERATIONS MADE OVER THE YEARS IN THE CENTRAL HALL AND TOWER STAIRHALL (pp. 53-65)

1. Persifor, Frazer, General Persifor Frazer (Philadelphia, 1907) facing pp. 162-64.

2. See TSH Log Jan. 28, 1958.

3. Independence Square State House, Maintenance Vouchers, Jan.-Oct.,1789 State Archives, Harrisburg. See Dwg. NHP-IND 3425, sheet 21. Apparently the Central Hall carving (egg and anchor and seven leaf grass) was repaired at this time. See John Watson's carving bill, June 16, 1790, Independence Square Papers, Public Records Office, Harrisburg. INHP photostat 10002.

4. See William Birch & Son 1799 view "Back of the State House, Philadelphia." See also INHP photographs 157.555 and 157.558 which show the backs of the original second floor flues with patched holes just above the smoke shelf levels.

4a. Extracts taken from the Haviland MSS, concerning the State House, Philadelphia, Vol. 2, University of Pennsylvania.

4b. Feb. 9, 1785, Journal of the Assembly of PA., 1783, Minutes 2nd Session 9th Assembly, p. 123. May 14, 1785, State House Yard Work Rolls 1785 Jan.-July, Ind. Sq. Folder 2 W, Div. of Pub. Records, Harrisburg. 1953 Archeological Excavation P57a, in grass Plot 1, Accession 61. This privy was apparently removed in 1857. City Controller's Report. Appropriation, 1856 & 1857, Municipal Archives, p. 391.

5. See HSR Independence Hall Historical Data, Section 1, p.77. See also extract of letter of George Escol Sellers 1895, Horace Wells Sellers Collection INHP, where is described "a flight of steps" in approaching this room at the Stairhall upper landing.

6. Peale was asked to remove this room: C. W. Peale to Philadelphia Common Council, Dec. 14, 1820, Etting Papers - Artists, p. 66, Historical Society of Pennsylvania. It was recommended to repair "a part of the ceiling of the Hall of the State House," Sept. 4, 1821: Minutes of Select Council, June 16, 1821-Sept. 30, 1830, p. 13, INHP Microfilm. George Escol Sellers in an 1895 letter recalled seeing this room; Horace Wells Sellers Collection, American Philosophical Society.

7. The exterior architectural style of this frontispiece was criticized by John Read, Jr. on Sept. 7, 1816, in a letter to the City Commissioners: Box 5, John Read, Jr. Papers 1769-1859, Library Company of Philadelphia. This frontispiece does not show in the John Lewis Krimmel painting "Election Day at the State House, Philadelphia, 1815," Winterthur Museum.

8. See INHP negative 1635 which shows this fanlight and the outline of the original arched opening above the 1816 opening.

9. Evidence of this 1816 hanging fixture was found and is presented in Historic Structure Report, Part II Supplement I Independence Hall Lighting, Sept. 1966, Chap. III, pp. 1-4. See also chapter II, p. 2, where in 1837 this fixture was described as a "lamp" and that it "be lighted with gas," implying that it had previously been lighted by oil. C. W. Peale had hung what he called patent lamps in his second floor museum in 1806. Views of the room show these to have been oil lighted chandeliers. See Chapter II, p. 4.

10. Ibid., Chapter III, pp. 1-4.

11. Philadelphia Day Book, 1812-1818, MSS. Coll., HSP, p. 170 [Am. b./6440].

12. See CH Log entry, Nov. 30, 1956, for a cross-section of the ribbon. The profiles of the central ribs were used to make up the corner rosettes. This ribbon is also recorded in Drawing NHP-IND 3543, where it is noted that the rough coat of the ceiling was made with a recess to secure the plaster of paris ribbon.

13. See HSR Front Entrance, p. 22. The c. 1816 carved pediment is so dated by the presence of only early machine-cut nails in its construction.

14. See TSH Log, Feb. 10, 1965.

15. See TSH Log Feb. 20, 1957 and INHP photographs 1642, 4237, 4239, 4241, 4168, 5119 and 5151 for views of and evidence of the clock weight cases. Portions of the cases still exist in the tower.

16. Public Ledger, Aug. 29, 1854, p. 2, col. 1. See the 1896 INHP photograph 1642 (Illustration 17), post-1898 photograph 7355 and the 1922 INHP photograph 18936 (Illustration 20). The 1922 second floor restoration moved the stair back into the Lobby and reused again some of the original balusters and carved brackets. The NPS recorded these stair parts and described their evidence on drawing 391/94000, sheet 18.

17. See photographs 1634 and 1635 of 1896 which record the mid-nineteenth century flagstone floor.

18. Rakestraw, Hicks & Colladay submitted an estimate for laying a new brick floor in 1789. See Samuel Hazard, Pennsylvania Archives, 1st Series, Vol XI, Philadelphia, 1855, pp. 558-59. Joseph Rakestraw in 1793 submitted another estimate and the Journal entry said it was "not done." See Journal, July 2, 1792- March 1796, entry March 14, 1793, pp. 241-42, Register General Financial Record, State Archives, Harrisburg. See the 1797 estimates and order for work to be

done, Gertrude MacKinney, ed., Pennsylvania Archives, 9th Series, Vol. II, Harrisburg, 1931, p.1258.

19. This flagstone floor may have been laid about 1854 when much work was being done by the City Councils and a tunnel was being dug through the unexcavated earth beneath the Central Hall floor. See Notes, "Building The Pennsylvania State House," note #1. It appears as though this flagstone was put on top of the old brick floor or else the floor level was raised to meet the higher original door sills. See Illustration 30 which shows a shorter riser at the main stair first step in 1869, and Illustrations 35 and 37 in later years.

20. The paint removal methods were presented in a letter, Thos. A. Fahy, painting contractor, to F. M. Etting, Jan. 6, 1875, Etting Collection, HSP. The work was underway Feb. 5, 1875, letter, E. L. Henry to F. M. Etting, Restoration of Independence Hall, Vol. 2, Chew Collection INHP.

21. An "Estimate" by Contractor Charles P. Westerhood of Jan. 14, 1875, used the phrase "... replace all ornamental mouldings at top...," and in his May 3, 1875 bill he said .."repairing wood work in the Two chambers and restoring carving and roseattes to stairs and pannels...130 feet of mouldings...20 roseattes." From examination we do not think the "top" meant the cornice work. Perhaps Westerhood secured some loose carving in addition to applying new rosettes. Where the 130 feet of molding was applied we do not know. Etting Collection, HSP.

22. The tabernacle frames are assembled with both cut and wire nails. Indeed, this may be one of the earliest dated uses of wire nails. Wire nails were invented in the 1850s but were used in only small sizes for picture frames, etc. Large size wire nails were not used widely until the 1880s. See "Nail Chronology as an aid to dating old buildings," by Lee H. Nelson, American Association of State and Local History, Technical Leaflet #48.

23. CH Log April 18, 1956, and INHP photographs CN-36892A and B,CN-36893A and B, and photographs in the Horace Wells Collection, INHP.

24. See INHP photographs 1633 and 1635 of 1896.

25. Ibid.

26. Ibid., Journal of Common Council 1868, I, 431, App. 535-36, June 4, 1868.

27. Henry Seybert, who gave the Centennial bell to the City of Philadelphia, announced by letter to City Council that it and his gift of the clock were both in place and working by July 4, 1876. Select Council Journal 1876 II, pp. 3, 34-35; App. 5, 33.

It is interesting that at Christ Church (Philadelphia) the equivalent framed openings for raising bells are in the tower southwest corner. This was observed when in March 1985 the framing was exposed to view during structural rehabilitation. Possibly the off-center openings were necessary in placing the many bells used there for change ringing.

28. See a head-on view of this rosette among the Sellers Papers at INHP, and in a duplicate mounted print in the INHP photo collection.

29. See INHP photographs 1631, 1642 and 9860, which show the bell in place. The caption says the bell was so displayed between 1876-1885.

30. Lee H. Nelson in his log for the structural rehabilitation in May 1963 noted the name "R. MacCorkle" was branded on the rosette framing, and the 1882 City Directory listed him as a plasterer. The Historic American Buildings Survey photographed the later modification. See INHP 157.580 and 157.1024.

31. HSR Independence Hall, Historical Data, Section 1, p. 111.

32. Charles P. Westerhood, Contractor, Estimate, Jan. 14, 1875, Etting Collection, "Bills, etc." HSP; see HSR Front Entrance.

33. HSR Independence Hall Section 1, p. 114. For scope of Rogers' work see 1899 contract "Supplemental Specifications" A52, Record Series 60.10, Mayor's Office Contracts, City Archives, Philadelphia.

34. Re: Roger's restoration of the stair spandrel see photographs INHP 5183, 5187, and 5191. Such newel buttons have been attributed to the amicable settlement of debts at the end of construction. As yet no primary source has been found which gives credence to this story. In all cases, however, the button-like apex of the newel cap automatically results from rotating in plan the profile of the normal handrail around the larger diameter newel. Faced with this extra central space, carpenters apparently embellished this focal point of the newel with contrasting material. In the 1831 Rules and Regulations for Measuring and Valuing Carpenters' Work, T. S. Manning, Philadelphia, p. 146, (copy at the library in Carpenters' Hall) under the heading "STAIRS" and "Caps to newels," is listed "Ivory or bone eye" which must refer to this decorative feature.

35. See INHP 18936 and 7355 photographs and prints in the H.W. Sellers Collection and HABS record photographs without paint.

36. TSH Log, March 18, 1957 (quotation from T. Mellon Rogers 1897 Specification INHP MSS collection).

37. The added cost of plaster was not only specified by Rogers, but its presence was verified, see TSH Log, March 18, 1957. For Rogers' brick floor work, see CH Log, Jan. 21, 1957-Feb. 4, 1957.

38. Ibid. 1899 Contract "Supplemental Specifications" and see photograph of the "Tower Room, south window," H. W. Sellers' Collection, INHP.

39. See photographs in the H. W. Sellers Collection INHP, photostat 1058: Bill of Stacey Reeves & Sons May 25, 1898 ... "Furnish & put up picture hooks in Main Hall..."

40. See photograph Feb. 4, 1925 "Rear door of Tower" CN-22063, negative missing; and Independence Hall Curator's Daily Record 1917-1946, March 26, 1924. There apparently had been a glass panel in this door before. INHP negative 1634, a pre-1896 photograph of the Tower Stairhall looking south, shows a glass panel in the upper large panel of the east door leaf.

NOTES

NATIONAL PARK SERVICE RESTORATIONS 1950s-60s (pp. 66-75)

1. See "Report on the 1951 Rehabilitation Work on the Buildings of Independence Square" by John B. Lukens, Architect, INHP, July 13, 1951.

2. See drawing NHP-IND 2081. The surrounding boards cracked from vibration, much of their strength having been removed when their largest area was cut away. The surrounding boards are not original. They may have been replaced several times. The February 26, 1818, Philadelphia Contributionship Survey No. 3795, Survey Book 1795-1824, p. 218, said the stair was "much worn" at that time. The present treads and risers may date from 1898. Stacy Reeves & Sons estimate for Restoration of Independence Hall May 25, 1898, typescript INHP.

3. See drawing 391/3512 and INHP negative 9268-A.

4. See photograph 157.1361. This flooring survived because it was covered with another floor from 1854-1922.

5. See subfloor construction INHP negative 9367 A&B.

6. See INHP Museum Accession numbers 219, 1707, 1814, 2361, 2528, 2529, 3260.

7. See INHP negative 4440. The area covers the 3rd-5th soffit flower, counting the SE corner flower first.

8. TSH Log, April 25, 1960. And see INHP negative 5157, 157.1001 and drawing NHP-IND 2660.

9. See photographs of some of the repair work: INHP 4490-2, 4641-6, 5124, 5155 and 5988.

10. INHP Museum Accession 1819. It was reported in the Oct. 1847 Burlington Gazette "that the conductor on the steeple of the State House [was] ... on the outside." Marshall Lefferts & Brother (trade catalog) "Patent Galvanized Iron" (New York, 1854) p. 47 (originally at Baker Library, Harvard University, Cambridge, MA).

11. CH Log, Feb. 26, 1958.

12. CH Log, Feb. 29, 1956, INHP Museum Accession 140.

13. See INHP Museum Accession 1308.

14. See HSR Front Entrance.

15. Christopher Marshall supplied the State House considerable "Cro glass" [crown glass] but also smaller quantities of "Br glass" [broad glass] and "Isinglass" in the 1750s-60s. Christopher Marshall's Bill, Loan Office Accounts,

1759-1766, Norris Papers, HSP, Oct. 26, 1754; Apr. 10, 1758; March, 1760; April 18, 1760. Pennsylvania Archives, VIII Series, Vol. VII, p. 6221, Sept. 5, 1762.

16. For brief periods during the upheaval of the structural rehabilitation and restoration by the Park Service, the Bell was rolled into the Supreme Court Room.

17. TSH Log, Dec. 20, 1956.

18. Paint removal in the Center Hall started in January 1956 and finished in May 1956. The difficulty of removing paint from the carving of the Tower Stairhall slowed the process down there. It took from February 1957 to June 1958. The woodwork repair which followed the paint removal took for both rooms from February 1956 to January 1958. See the CH & TSH Log books and INHP photographic file.

19. The 1985 stereophotogrammetric contract was with Dennett, Muessig, Ryan & Associates of Iowa City, Iowa, CX 4000-5-0020. Glass plate stereopair photographs of the building once processed, are mounted in the optical viewing system of a stereoplotter to produce pencil plott drawings and ink tracings. From these, accurate measurements of the building can be produced. The stereo photographs also serve as a detailed permanent record of the building's current condition.

ILLUSTRATIONS

Illustration 1

First and second floor plans and elevation of the Pennsylvania State House dated "A.D. 1732" within the panel above the entrance.

The variations between this drawing and what was built are substantial enough to show clearly this was a preliminary drawing presenting the program and level of sophistication desired for the building.

Indeed this is probably the drawing referred to in the following quotation: "Mr. Speaker, [Andrew Hamilton] produced a Draught of the State-House containing the Plan and Elevation of that Building; which being viewed and examined by the Several Members was approved of by the House" (PA Archives Series 8, III, 2154). This drawing survived as did Illustration 2 because they were undoubtedly not used during construction (Dickinson Papers, Historical Society of Pennsylvania, INHP negative 157.809).

Illustration 1

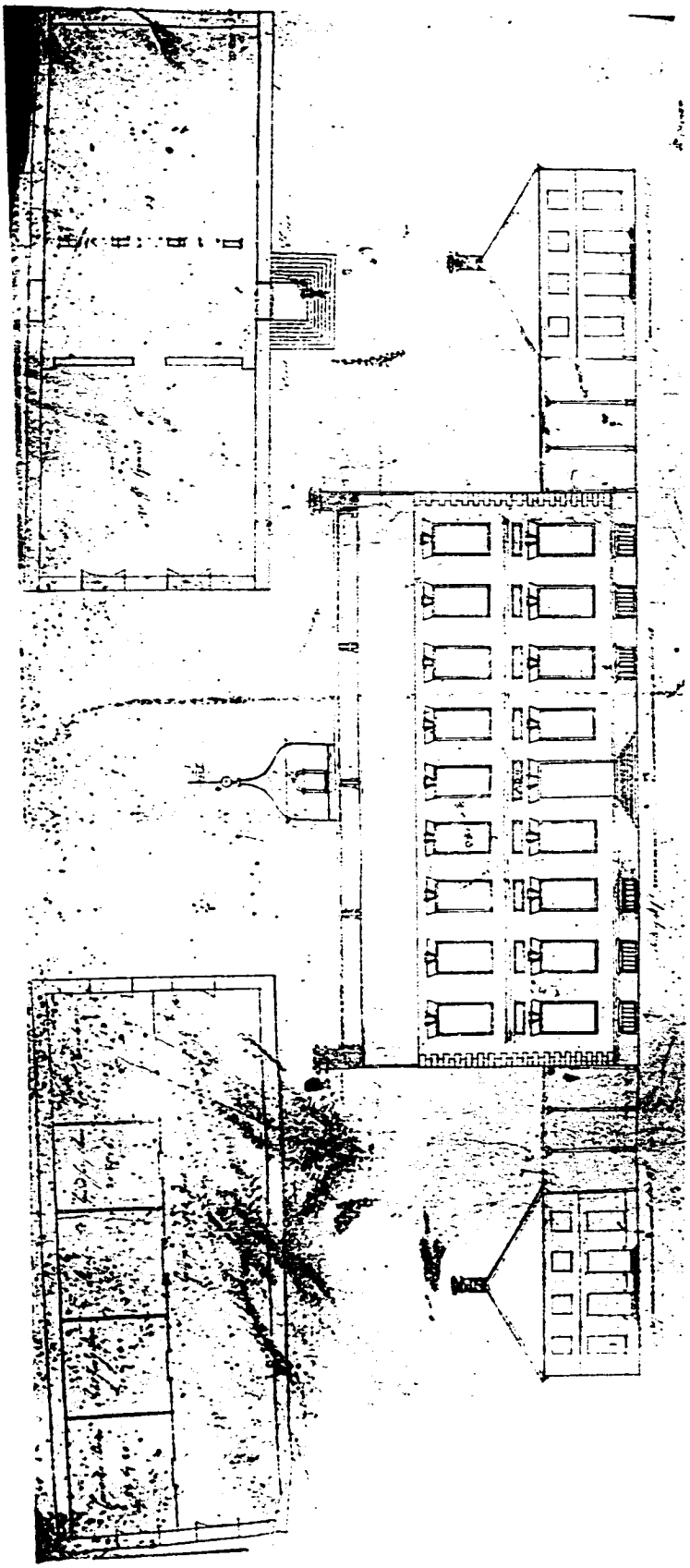
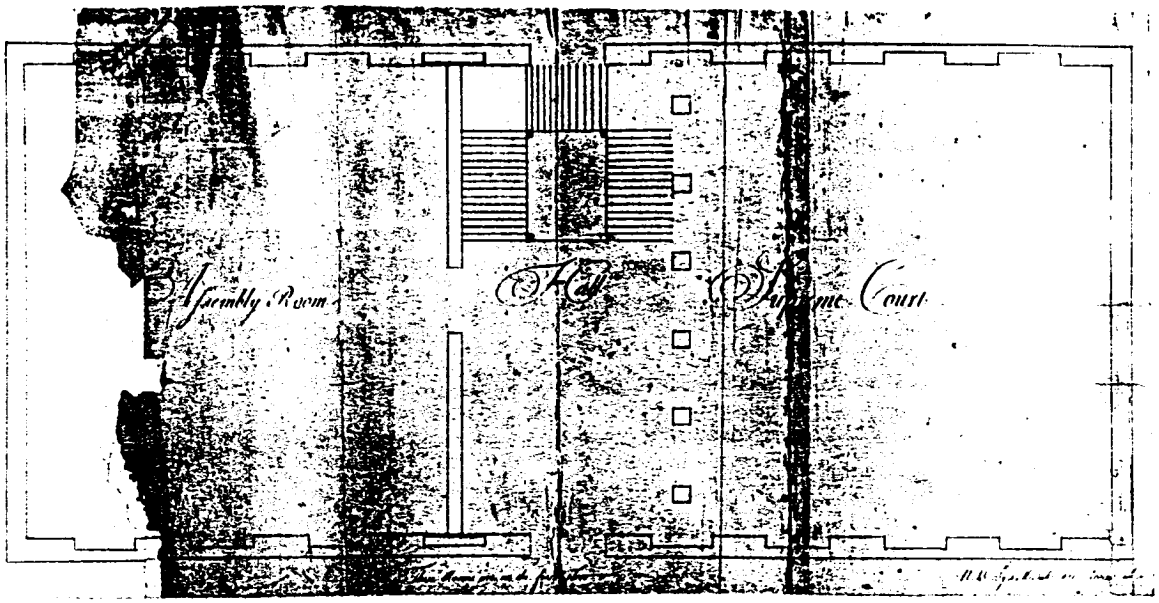


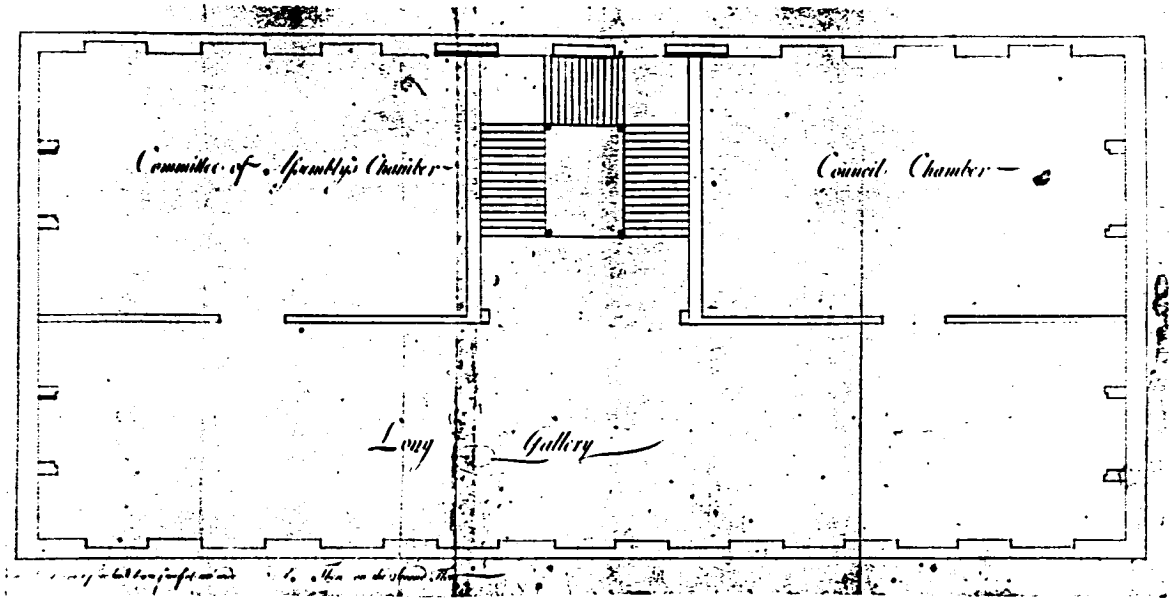
Illustration 2

Another preliminary drawing, these first and second floor plans of the Pennsylvania State House come close to the way the building was built, except that they show too many archways between the Supreme Court and Central Hall, and they do not include the stair to the garret which is known to have led up from the southeast room (Committee of Assembly's Chamber) along the west wall. Indeed, either the garret stair was ignored in this schematic drawing, or, by the representation of the main stair newels one can see that this scheme suggested the garret stair continue up above the main stair. The newels of the stair leading off from the first floor are filled in dark. Those leading off from the second floor are also rendered dark, i.e., the stair was meant to ascend to the garret.

This drawing, like Illustration 1, has survived because it also was not used during construction (Penn Papers, Historical Society of Pennsylvania).



First Floor Plan



Second Floor Plan

Illustration 3

1735 bill receipted by Edmund Woolley on July 22, 1736 for drawings of the State House made for John Penn and paid for by his agent James Steel (Penn Papers, Historical Society of Pennsylvania).

As the building was substantially complete by 1735 it is now felt that this bill was for "as built" drawings, and does not relate to the preliminary scheme drawings which have survived and are reproduced in Illustrations 1 and 2.

This receipted bill clearly established Edmund Woolley as an accomplished draftsman.

Illustration 3

1735 The Honourable John Penn Esquier Dr

To drawing the Elivation of the Fromt one End the Roof Baleoney Chimneys and Forret of the State House With the fronts and Plans of the Two offiseis And Piazzas allso the Plans of the first and Second floors of the State House

To Edmund Woolley £ 5"0"0

Recd the 22 of July 1736 of James Steal the above mentioned Five Pounds

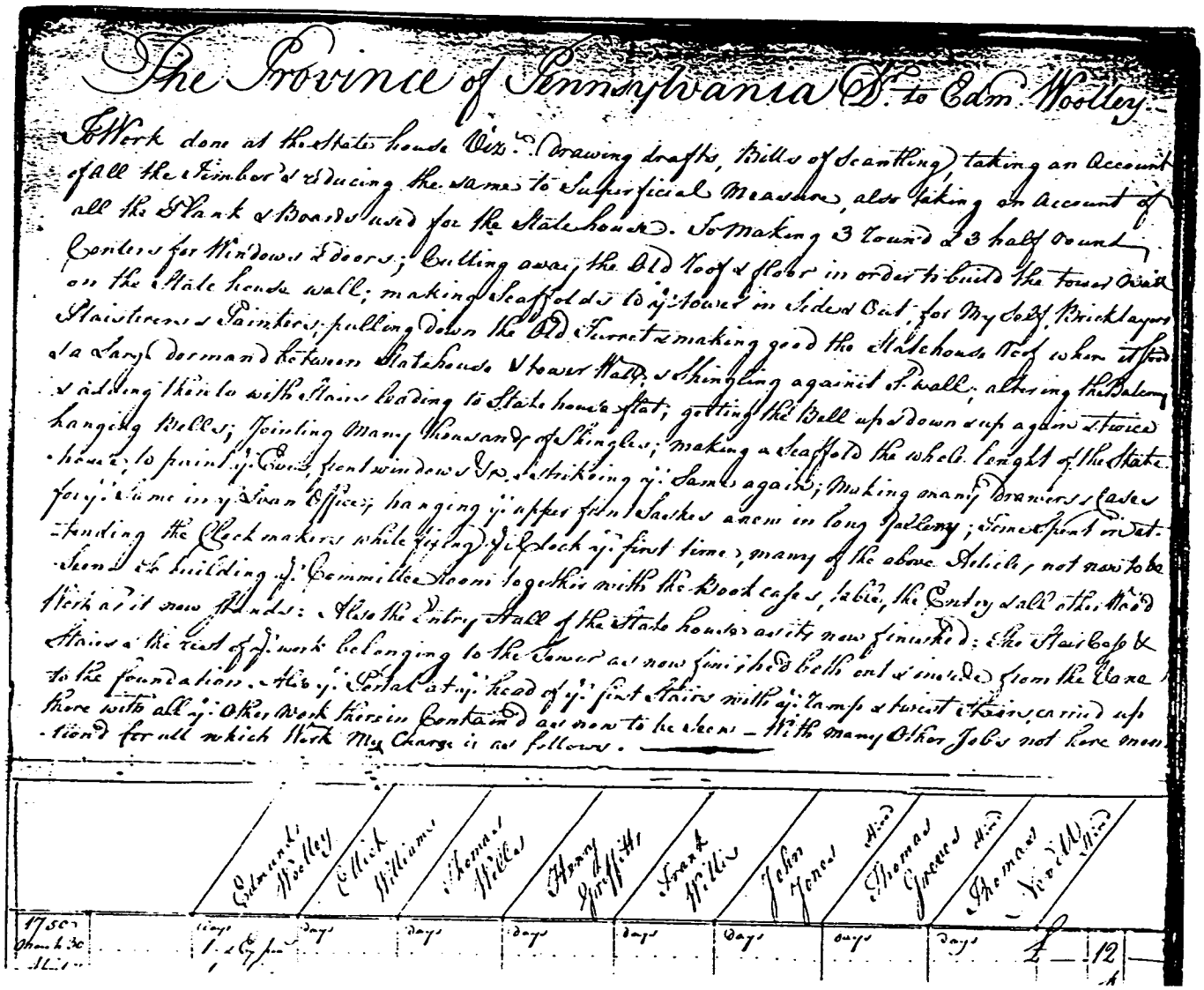
per me Edmund Woolley

Illustration 4 and 4a

Edmund Woolley wrote this description of the 1750s work entailed in adding the, Committee Room, Tower Stairhall, Steeple, Tall Case Clocks, and finishing the Central Hall. His narrative is not chronological as is Samuel Harding's carving account. But he does describe his work from "drawing drafts (drawings) ... making Scaffolds ... Jointing many thousands of Shingles ... the Entry Hall ... the Stair Case...," etc. (Norris Papers, Historical Society of Pennsylvania).

The accompanying account lists the carpenters employed by Woolley as well as his own time. Woolley was paid six shillings per day. His highest paid man received five shillings, others received three shillings and six pence, and as low as two shillings. The total cost amounted to one thousand four hundred and ninety pounds, fifteen shillings and five pence halfpenny. The account covers the period March 30, 1750 - March 17, 1756.

Illustration 4



The Province of Pennsylvania D.r to Edm. Woolley.

To Work done at the State house Viz.t Drawing drafts, Bills of Scantling, taking an Account of all the Timber & Reducing the same to Superficial Measure, also taking an Account of all the Plank & Boards used for the State house. To Making 3 round & 3 half round Cornices for Windows & Doors; Cutting away the Old Roof & floor in order to build the Tower Work on the State house wall; making Scaffolds & by.d Tower in Side & Out; for My Self, Bricklayers Plaisterers & Painters; pulling down the Old Furnace & making good the State house Roof when it stood as Large Dormand between State house & Tower Walls & Shingling against the Wall; altering the Balcony & adding Rails to with Stairs leading to State house flat; getting the Bell up & down & up again & twice hanging Bells; Joining Many Thousands of Shingles; making a Scaffold the whole Length of the State house & to paint by.d Cornice & front windows &c. & striking by.d same again; Making many Drawers & Cases for by.d Clock in by.d Town Office; hanging by.d upper first Sashes anew in long Gallery; Dinner spent in Attending the Clockmakers while fixing by.d Clock by.d first time; many of the above Articles not now to be seen in the building by.d Committee Room together with the Book cases, Tables, the Entry Wall & other Work as it now Stands: Also the Entry Wall of the State house as it now finished: the Stair Case & Stairs & the rest of by.d work belonging to the Tower as now finished: the Bell cast & made from the Clock to the Foundation. Also by.d Portal at by.d head of by.d first Stairs with by.d Lamps & Turret Stairs, carried up there with all by.d Other Work therein Contained as now to be seen — With many Other Jobs not here mentioned for all which Work My Charge is as follows.

		Edmund Woolley	Ellick Williams	Thomas Wells	Henry Gorsuch	Isaac Wells	John Jones	Hired Thomas Greene	Hired Thomas Neville
1750		days	days	days	days	days	days	days	days
March 30		1 & 6 p.s							4 — 12 —

Norris Papers, Misc.
Accts., Small Account
books(MSS, HSP)

"THE PROVINCE OF PENNSYLVANIA Dr. To Edm^d Woolley. -

To Work done at the State house Viz^t drawing drafts, Bills of Scantling, taking an Account of all the Timber & reducing the same to Superficial Measure, also taking an Account of all the Plank & Boards used for the State House. To making 3 round & 3 half round Centers for Wingows & doors; Cutting away the Old roof & floor in order to build the tower Wall on the State house wall; making Scaffolds to y^e tower in Side & Out, for My Self, Bricklayers Plaisterers & Painters; pulling down the Old Turret & making good the State house roof where it stood & a large dormand between State house & tower Wall, & Shingling against S. wall; altering the Bal coney & adding thereto with Stairs leading to State house flat; getting the Bell up & down & up again & twice hanging Bells; Jointing Many thousand of Shingles; making a Scaffold the whole lenght of the State house, to paint y^e Eves, front windows &c. & Strikeing y^e Same again; Making many drawers & cases for y^e Same in y^e Loan Office; hanging y^e upper front Sashes anew in long Gallery; Time Spent in attending the Clock makers while fixing y^e Clock y^e first time, many of the above Articles not now to be Seen. To building y^e Committee room together with the Bookcases, table, the Entry & all other Wood Work as it now stands. Also the Entry Hall of the State house as its now finished: The Stair Case & Stairs & the rest of y^e work belonging to the tower as now finished both out & inside from the Vane to the foundation. Also y^e Portal at y^e head of y^e first Stairs with y^e ramp & twist Stair , carried up there with all y^e Other Work therein Contain'd as now to be Seen - With many Other Jobs not here mentiond for all which Work My Charge is as follows. "

Illustrations 5, 6, 5a and 6a.

Receipted bill of Samuel Harding's woodcarving for the 1750s additions of the tower, Committee Room, Tower Stair hall, Central Hall and the Tall Case Clocks.

As the installation of woodcarving would be one of the finish carpenter's last tasks before the painters were brought in, this dated list of Harding's carved work gives the probable sequence of construction of these additions.

This bill also establishes that the Central Hall and Tower Stairhall have almost completely original woodwork (Norris Papers, Historical Society of Pennsylvania).

Illustration 5

Jan^ry 29^th 1753 Carved Work Done for the State house
by Samuel Harding for the out Side of the Stepel[s]
to 8 blases for the Baleoney hurns at 10^s p^r blase — 4-0-0.
the out Side of the back door to 5 flowers at 4^s p^r peice 1-0-0.
to 11 flowers for ditto door at 2-6 p^r peice — 1-7-6.
to 6 flowers & 6 fishes for the pillars of ditto door 0-6-0.
to 4 Compositta Capittals 2 plasters & 2 quarter
plasters in them Six fronts at 1-15-0 p^r front — 10-10-0.
these Capittals for the queen room —
to 21 brackits for the upper Stairs at 5^s p^r peice — 5-5-0.
1754 to 53 Mundulyouns within the Stepel at 8^s p^r peice 21-4-0.
Jan^ry 1 to 4 truses for the 2 Winders within y^e Stepel at 1-10-0 6-0-0.
to 44 flowers between y^e Mundulyouns at 1-3 p^r peice 2-15-0.
the Carven of 2 tabernacles frames one of each
Side of the Vennesion Winder
to 4 Small truses for ditto frames at 5^s p^r trus — 1-0-0.
to 2 freses for ditto frames at 1-0-0 p^r frame — 2-0-0.
to 8 flowers for ditto frames at 2^s p^r flower — 0-16-0.
to 4 bottom truses for ditto frames at 16^s p^r truses — 3-4-0.
to 4 Jonick Capittals for the Out Side of the
Vinneshon Winder in them 7 fronts at 1-2-6 p^r front 7-17-6.
to 6 ditto Capittals for y^e inside of ditto Winder in them
12 fronts at 1-2-6 p^r front — 13-10-0.
to 6 draps of Rusks for the open plasters y^e Side of
the ditto Winders at 12^s p^r drap 3-12-0.
1755 Jan^ry 1 to 4 draps of Rusks in the open plasters Opsite the
Vennesion Winder at 10^s p^r drap — 2-0-0.
to 146 Banisters & 6 posts for y^e grand Saire Case — 7-12-0.
at 1^s p^r peice to Nine plasters for ditto — 0-9-0.
to 4 dubel plasters for ditto Sair Case — 0-8-0.
to 37 Brackits at 5^s p^r peice for ditto Stair Case — 9-0-0.
to 2 freses 37 foot at 4^s p^r foot for ditto Stair Case 7-10-0.
to 72 foot of Lefe Grass for y^e Capings of 16 Capittals
in the doorick order in the passage 9 peice p^r foot 2-14-0.
to 12 Capittals y^e Oulo Carved egg & in y^e fasca 3 fishes
and 3 flowers the 12 Capittals at 12^s p^r Capittals 7-4-0.
to 4 Lesser Capittals at 7^s p^r Capittals — 1-8-0.
to 53 Mundulyouns in y^e passage Carved with three Leaf
grass 3 foot in each at 4^s p^r foot — 2-13-0.
two pedements frames in y^e Passage one on each Side of
the door to two keStones for ditto frames with fases 15^s p^r 1-10-0.

(carried Over to the Other Side). £126-15-0

(N^o 1.)

Historical Society of Pennsylvania, Norris Papers, General Loan Office Account Books, 1750-1768. (Bound, unpaged MS) Samuel Harding Accounts.

		£	s	d
Jan^{y}	29th 1753. Carved Work Done for the State house by Samuel Harding for the out Side of the Stepel [Steeple]			
	to 8 blases [blazes or flames] for the balconey hurns [urns] at 10^{s} p^{r} blase	4	0	0
	the out Side of the back door to 5 flowers at 4^{s} p^{r} peice	1	0	0
	to all flowers for dito door at 2^{s}-6^{d} p^{r} peice	1	7	6
	to 6 flowers & 6 fishes for the pillars of ditto door	0	6	0
	to 4 Compositta Capittals 2 plasters [pilasters]) & 2 quarter plasters in them Six fronts at 1£) 15^{s}0^{d} p^{r} front these Capittals for the green room	10	10	0
	to 21 brackits for the uper Stairs at 5^{s} p^{r} peice	5	5	0
1754	to 53 Mundulyouns [modillions] within the Stepel at 8^{s} p^{r} peice	21	4	0
Jan^{y} 1	to 4 truses for the 2 winders within y^{e} Stepel at 1£10^{s}0^{d}	6	0	0
	to 44 flowers betwen y^{e} Mundulyouns at 1^{s}3^{d} p^{r} peice	2	15	0
	The Carven [carving] of 2 tabernackels [tabernacles] frames one of each Side of the Venneshon Winder [Venetian window]			
	to 4 Small truses for ditto frames at 5^{s} p^{r} trus	1	0	0
	to 2 freses [freizes] for ditto frames at 1£0^{s}0^{d} frame	2	0	0
	to 8 flowers for ditto frames at 2^{s} p^{r} flower	0	16	0
	to 4 bottom truses for ditto frames at 16^{s} p^{r} truses	3	4	0
	to 4 Ionick Capittals for the Out Side of the Venneshon Winders in them 7 frunts at 1£2^{s}6^{d} p^{r} front	7	17	6
	to 6 ditto Capittals for y^{e} inside of ditto Winder in them 12 fronts at 1£2^{s}6^{d} p^{r} front	13	10	0
	to 6 draps [drops?] of husks for the open plasters y^{e} side of the ditto Winders at 12^{s} p^{r} drap	3	12	0
1755 Jan^{y} 1	to 4 draps of husks in the open plasters oposite the Venneshon Winder at 10^{s} p^{r} drap	2	0	0
	to 146 Banasters & 6 posts for y^{e} Grand Sare Case at 1^{s} p^{r} peice to Nine plasters for ditto	7	12	0
	to 4 dubel plasters for ditto Sair Case	0	9	0
	to 37 Brackits at 5^{s} p^{r} peice for ditto Stair Case	0	8	0
	to 2 freses 37 foot at 4^{s} p^{r} foot for ditto Stair Case	9	0	0
	to 72 foot of 7 Lefe [leaf?] Grass for y^{e} Capings of 16 Capittals in the doorick order in) the passage 9^{d} pence p^{r} foot)	7	10	0
	to 12 Capittals y^{e} oulo [ovolo] Carved egg &) in y^{e} fasca [fascia] 3 fishes and 3 flowers) the 12 Capittals at 12^{s} p^{r} Capittals)	2	14	0
	to 4 Lesser Capittals at 7^{s} p^{r} Capittals	7	4	0
	to 53 Mundulyouns in y^{e} pasage Carved With three Leaf grass 3 foot in each at 4^{d} p^{r} foot) two pedements frames in y^{e} Pasage one on each) Side of the door to two kestones [keystones]) for ditto frames With fases [faces] 15 p^{r} p)	1	8	0
		2	13	0
		1	10	0
	Carryd over to the other Side	£ 126	15	0

Illustration 6

1756	to 4 truses for y^e ditto frames at one pound p^r truss	£ 4-0-0
Jan^y 7^th	to 28 foot of Arakittrive Carved 3 Members at 1-3 p^r foot	1-18-0
	to 32 foot of 3 Leaf Grass in y^e Open plaster at 4 p^r foot	0-10-8
	to 18 foot of eggs for y^e pedement of ditto frames at 9 p^r foot	0-13-6
	to 27 foot of 3 Leaf grass for ditto at 4 p^r foot	0-9-0
	to 5 foot of Ribbin & flower for ditto frames at 9 p^r foot	0-3-9
	Carved Work Run about y^e dial at y^e Cast end	
	to 6 truses that Supports y^e pedement at 1-2-6 p^r piece	6-15-0
	to 12 fishes for ditto truses at 1 p^r fish	0-12-0
	to 25 foot of Large Bulo Carved with Eyes at one Shilling	1-11-0
	A Large Beed Carved with flower Coap 18 foot at 1 p^r foot	0-18-0
	Beed with Riben & flower 14 foot & ½ at 1 p^r foot	0-14-6
	to 5 foot of 5 Leaf grass at 4 p^r foot	0-19-0
	to 33 foot of 3 Leaf grass at 4 p^r foot	0-11-0
	to 2 Ornaments Hands Cutthron & Round Minit hand	1-17-6
	to 4 trusses at 7 p^r truss for y^e Bottom	1-8-0
	to 2 Cuttuses at y^e bottom at 1-2-6 p^r peice	2-5-0
	to 4 flowers for y^e Scrolls at 1-6 p^r peice	0-6-0
	to 6 draps under y^e upper truses at 15 p^r peice	4-10-0
	to y^e Not & Jags in the pedement	3-15-0
	to y^e 2 Angel peices at the bottom of y^e dial Swep	0-10-0
	the dial at y^e East end to 6 truses that Supports y^e pedement	6-15-0
	to 6 Cuttuses for y^e bottom at one pound p^r peice	6-0-0
	to 2 Side ditto at 5 p^r peice	0-10-0
	to 38 foot of 5 Leaf grass for y^e pedement at 6 p^r foot	0-19-0
	to 33 foot y^e 3 Leaf gr. for ditto at 4 p^r foot	0-11-0
	to 25 foot of Bulo Carved With eggs at 1-3 p^r foot	1-11-0
	to 14 foot & ½ of Riben & flower on a Beed at 1 p^r foot	0-14-6
	to 18 foot of flower open a Large beed at 1 p^r foot	0-18-0
	to 6 flowers for y^e Scrolls at 1-3 p^r peice	0-7-6
	to 12 fishes for y^e truses that Supports y^e Pedement	0-12-0
	to 5 draps that is Between y^e Cuttuses at 4 p^r drap	1 0 0
	to y^e 6 draps Under y^e upper truses at 15 p^r draps	4-10-0
	to 2 Ornegrant hand Cutthrow Minit Cut throw	1:17:6
	to Not and Jags in y^e pedement	3:15:0
	to 2 angels peices in y^e bottom of y^e dial Swep	0-10-0
	Memorandom of a brake for y^e upper Landing of y^e grand Stair Case it was got out too broad at first & I Carved Three In it & y^e two y^e odd peice 20 foot 6 Inches at 4 p^r foot	4-2-0
	Amount of page 2	£ 68-18-11
	Errors Excepted Brought from the other Side	£ 126-15-0
		£ 195:13:11

(p^g 2)

		£	s	d
1756	to 4 truses for ye ditto frames at one pound pr	4	0	0
Jany 7th	truss			
	to 28 foot of arakittrive [architrave] Carved 3 members at 1s3d pr foot	1	18	0
	to 32 foot of 3 Leaf Grass in ye Open plaster at 4d pr foot	0	10	8
	to 18 foot of eggs for ye pedement of ditto frames at 9d pr foot	0	13	6
	to 27 foot of 3 Leaf grass for ditto at 4dpr foot	0	9	0
	to 5 foot of Riblan [ribbon?] & flower for ditto frames at 9d pr foot	0	3	9
	Carved Work Don about ye dial at ye East end to 6 truses that Supports ye pedement at 1£2s6d pr peice	6	15	0
	to 12 fishes for ditto truses at 1s pr fish	0	12	0
	to 25 foot of Large Oulo Carved with eggs at one shilling 3d pr pc [?]	1	11	0
	A Large beed Carved With flower Coap [?] 18 foot at 1s pr foot	0	18	0
	A beed With Riben & flower 14 foot & 1/2 at 1s pr foot	0	14	6
	to 38 foot of 5 Leaf grass at 6d pr foot	0	19	0
	to 33 foot of 3 Leaf grass at 4d pr foot	0	11	0
	to 2 Ornaments hands Cutthr [?] on ye hour & Minit hand	1	17	6
	to 4 truses at 7s pr truse for ye Bottom	1	8	0
	to 2 Cuttusees at ye bottom at 1£ 2s6d pr peice	2	5	0
	to 4 flowers for ye Serfets [soffits?] at 1s6d pr peice	0	6	0
	to 6 draps under ye upper truses at 15s pr peice	4	10	0
	to ye [k] not & Sags [swags] in the pedement	3	15	0
	to ye 2 angel peices at the bottom of ye dial Swep	0	10	0
	the dial at ye West End to 6 truses that Suports ye pedement	6	15	0
	to 6 Cuttuses for ye bottom at one pound pr peice	6	0	0
	to 2 Side ditto at 5s pr peice	0	10	0
	to 38 foot of 5 Leaf grass for ye pedement at 6d pr foot	0	19	0
	to 33 foot of 3 Leaf gras for ditto at 4d pr foot	0	11	0
	to 25 foot of oulo Carved With eggs at 1s3d pr foot	1	11	0
	to 14 foot & 1/2 of riben & flower on a beed at 1s pr foot	0	14	6
	to 18 foot of flower Cope on a Large beed at 1s pr foot	0	18	0
	to 6 flowers for ye Serfets at 1s-3d pr peice	0	7	6
	to 12 fishes for ye truses that Supports ye Pedement	0	12	0
	to 5 draps that is betwen ye Cuttuses at 4s pr drap	1	0	0
	to ye 6 draps Under ye upper truses at 15s pr drap	4	10	0
	to 2 Ornement hand hour & Minit Cut throu	1	17	6
	to not and Sags in ye pedement	3	15	0
	to 2 angels peices in ye bottom of ye dial Swep	0	10	0
	Memorandom of a frese for ye upper Landing of ye grand Stair Case it Was got out too broad at first So I Carved Three Insted of two ye odd peice 20 foot 6 inches at 4s pr foot	4	2	0
	Sum Totall of page 2	68	18	11
Erros Excepted	Brought from the Other Side	126	15	0
		195	13	11

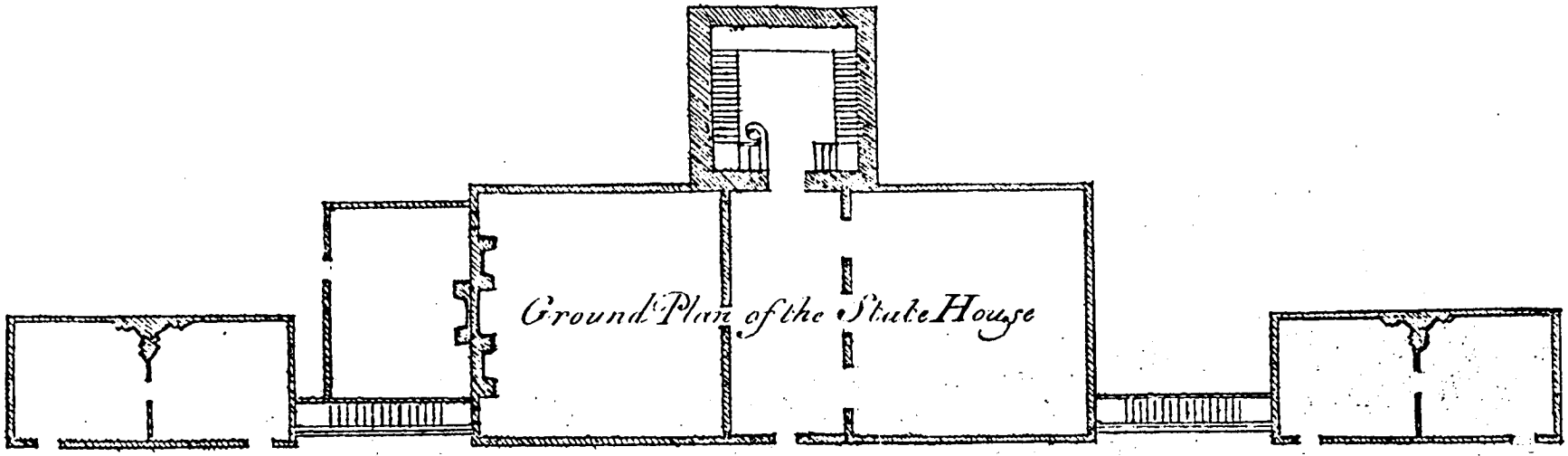
Illustration 7

This "Ground plan of the State House" shows the building as completed in 1756, and as it remained until 1812. Found quite by accident by the author in 1978, this plan is the first that has come to light which shows the interior layouts of the Tower Stairhall, original wing buildings and the Committee Room of the Assembly. The massive scrolled bottom newel of the grand stair in the Tower Stairhall certainly impressed the draftsman of this plan.

Unrelated to the subject of this report, but of particular importance is that each wing is shown with a single chimney stack containing flues from corner fireplaces at the back of the two offices on each floor. We are all more used to seeing a series of north elevations of the State House which show instead two chimneys per wing. Some of these drawings were published in England, and apparently one error in graphic representation was perpetuated in subsequent graphic presentations. There are several other contemporary views of the State House, however, which show the wings with a single chimney: see Charles Willson Peale's 1778 portrait of the French Minister Gerard (INHP negative 6376); Rembrandt Peale's 1778 watercolor of the State House (INHP negative 25758); and Thackara's 1790 Columbian Magazine view after C. W. Peale's Gerard portrait (INHP negatives 16545, 25759).

Other details to note in this plan are the marks indicating doors put through the east wall of the Assembly Room to the Committee Room and Arcade, and the railings at the Arcade fronts which read clearly in contrast to the cross-hatched walls.

The plan is so carefully drawn that it is easy to believe that the City Surveyor was its draftsman as said in its catalogue entry: " 'taken from' plans of John Lukens, principal City Surveyor 1761-1774 'Draughts of City Blocks,' c. 1814, item 90.6, vol. Fifth Division from Chesnut to Walnut," City Archives, Philadelphia.

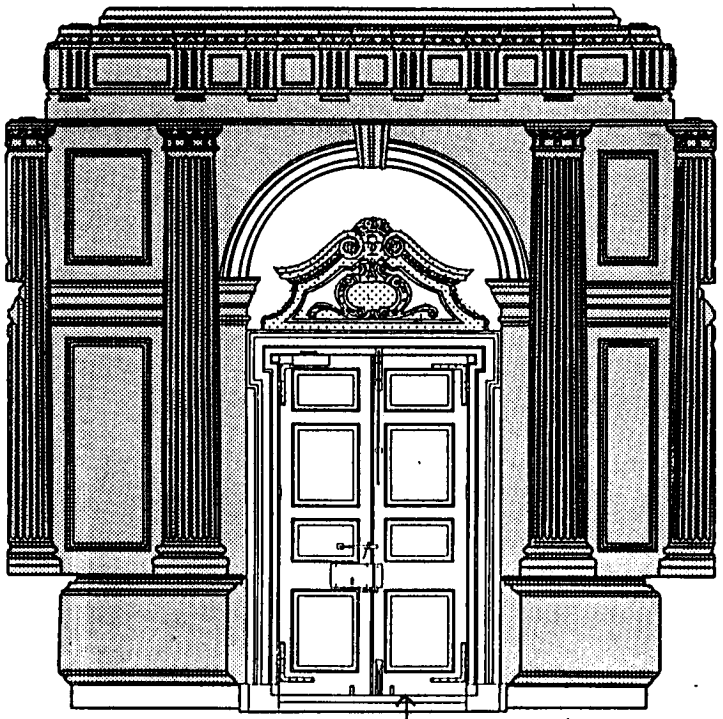


line of Chesnut Street

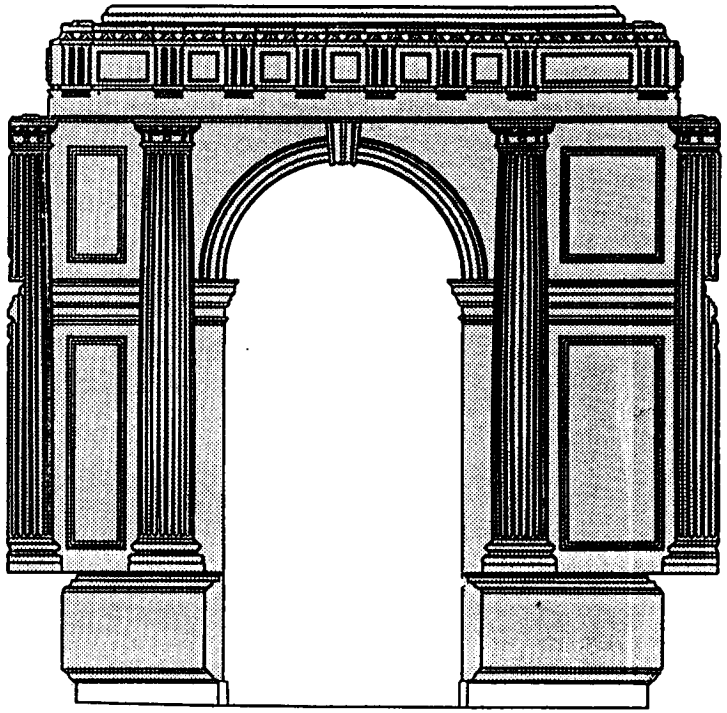
399 Feet 9 Inch

Chesnut Street

Illustration 7



NORTH WALL

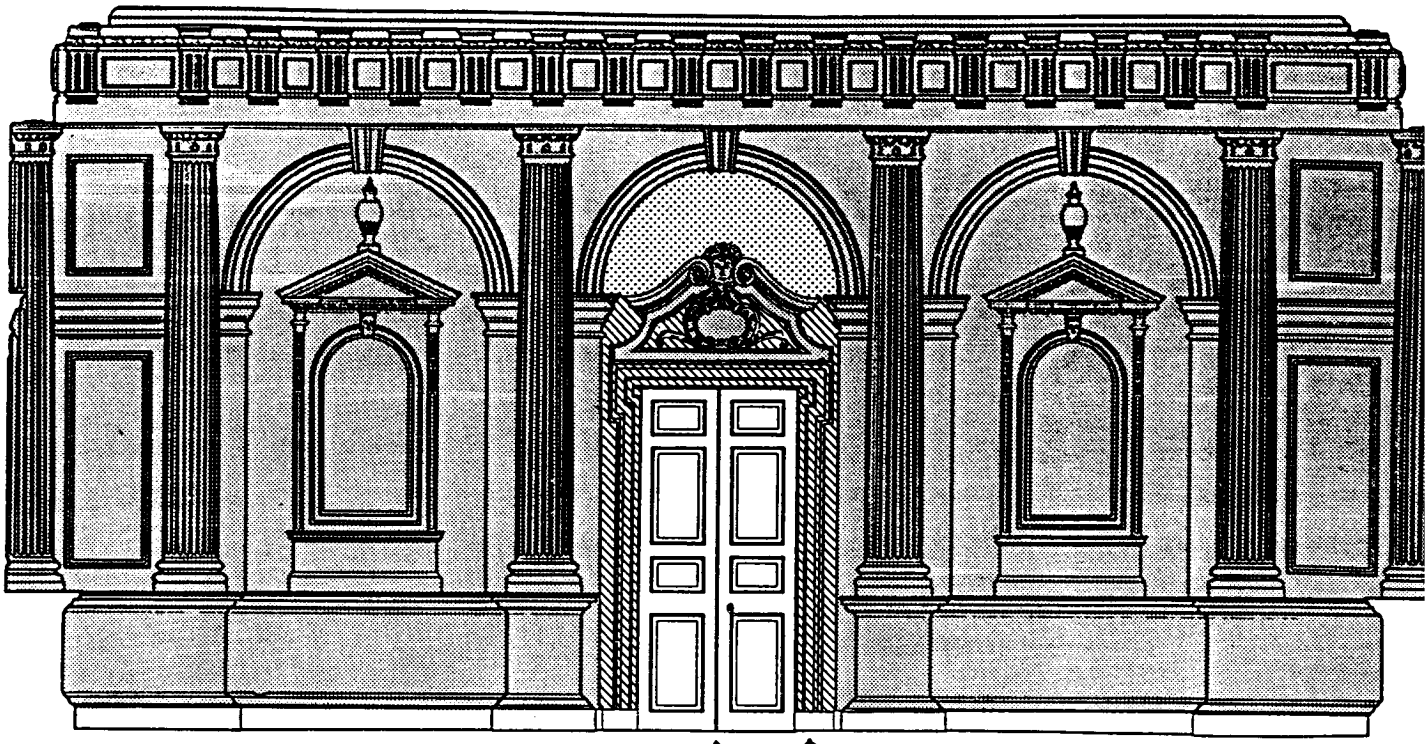


SOUTH WALL

1750'S WOODWORK
1816 "
1960'S "

THE CENTRAL HALL
INDEPENDENCE HALL

Illustration 8

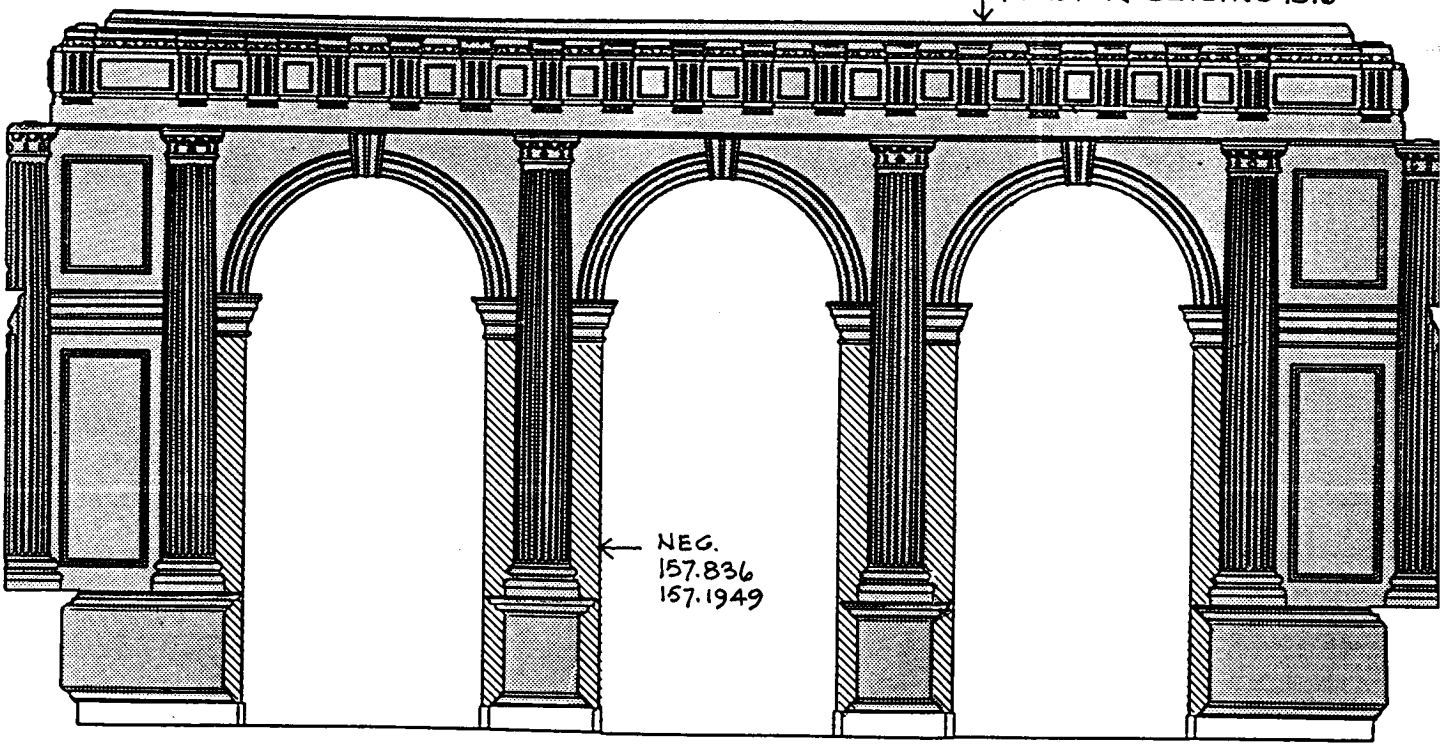


EAST WALL

NEG INHP 3374-B, 3379, 157.1753-4, 157.1759-60, D'WG NHP-IND 2658

NEG. 157.1945

PLASTER CEILING 1816



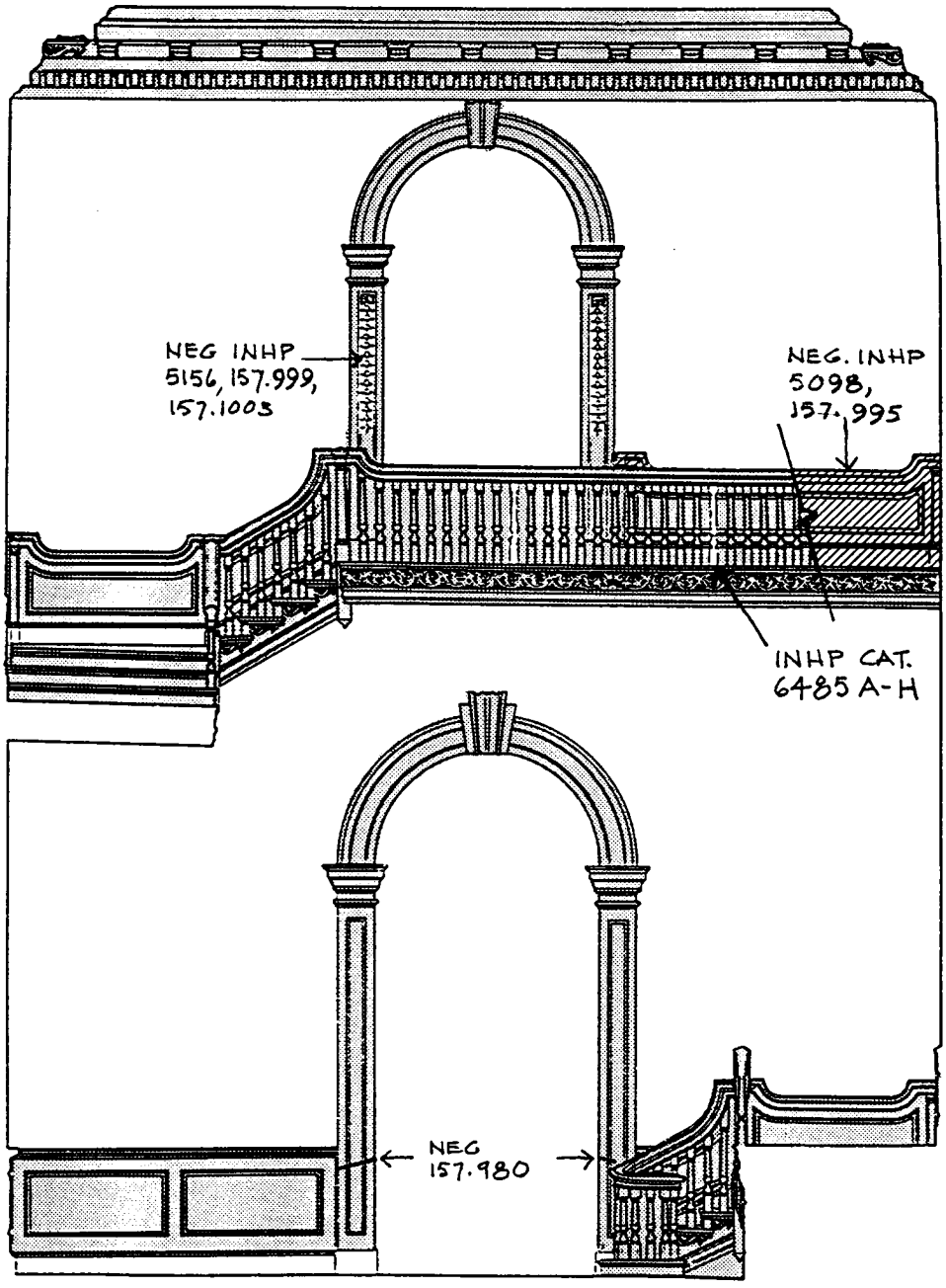
NEG. 157.836 157.1949

WEST WALL

1740'S WOODWORK
1750'S "
19TH C. "
1960'S "

THE CENTRAL HALL
INDEPENDENCE HALL

Illustration 10



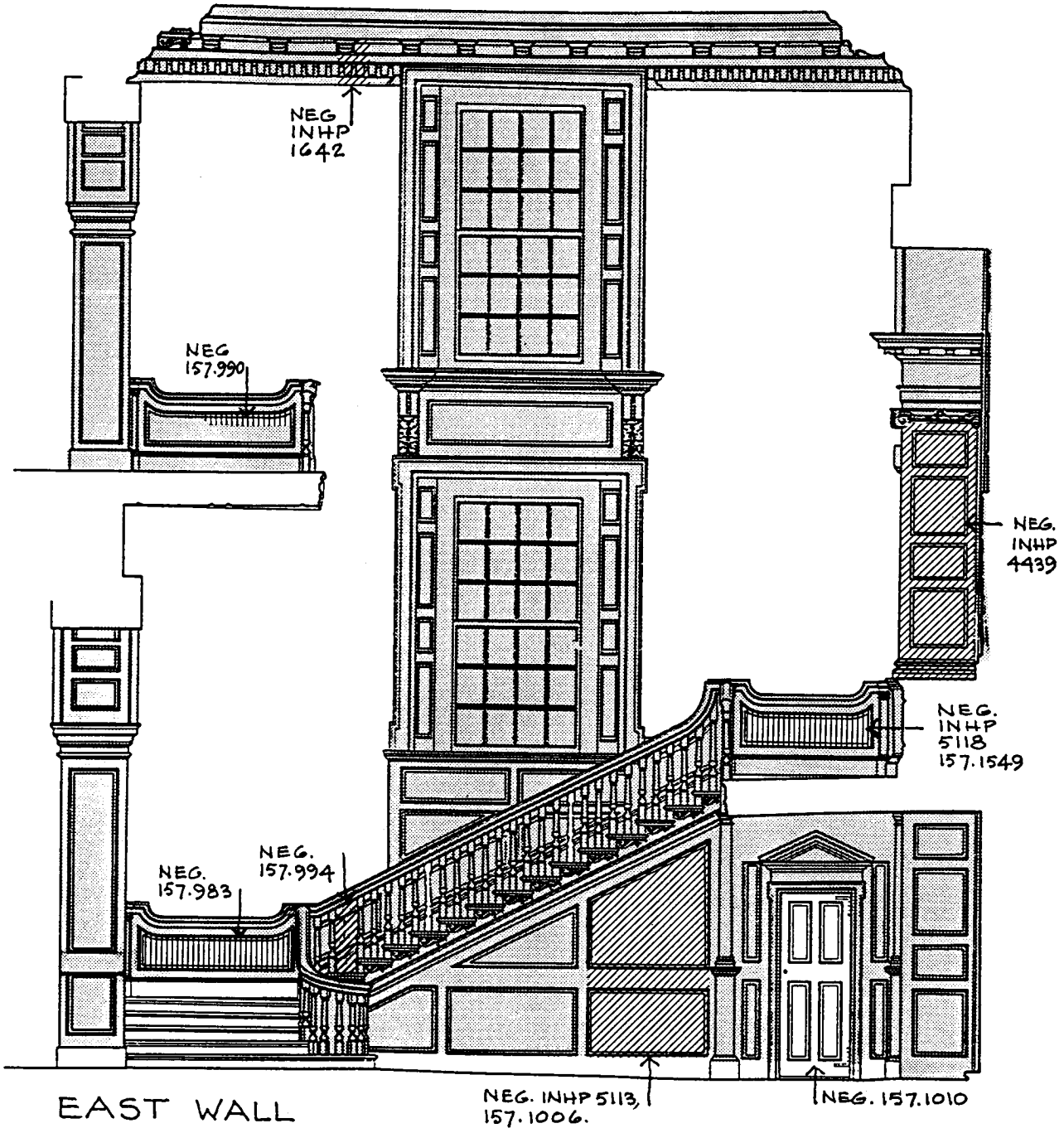
NORTH WALL

1750'S WOODWORK

1920'S "

1960'S "

THE TOWER STAIRHALL
INDEPENDENCE HALL

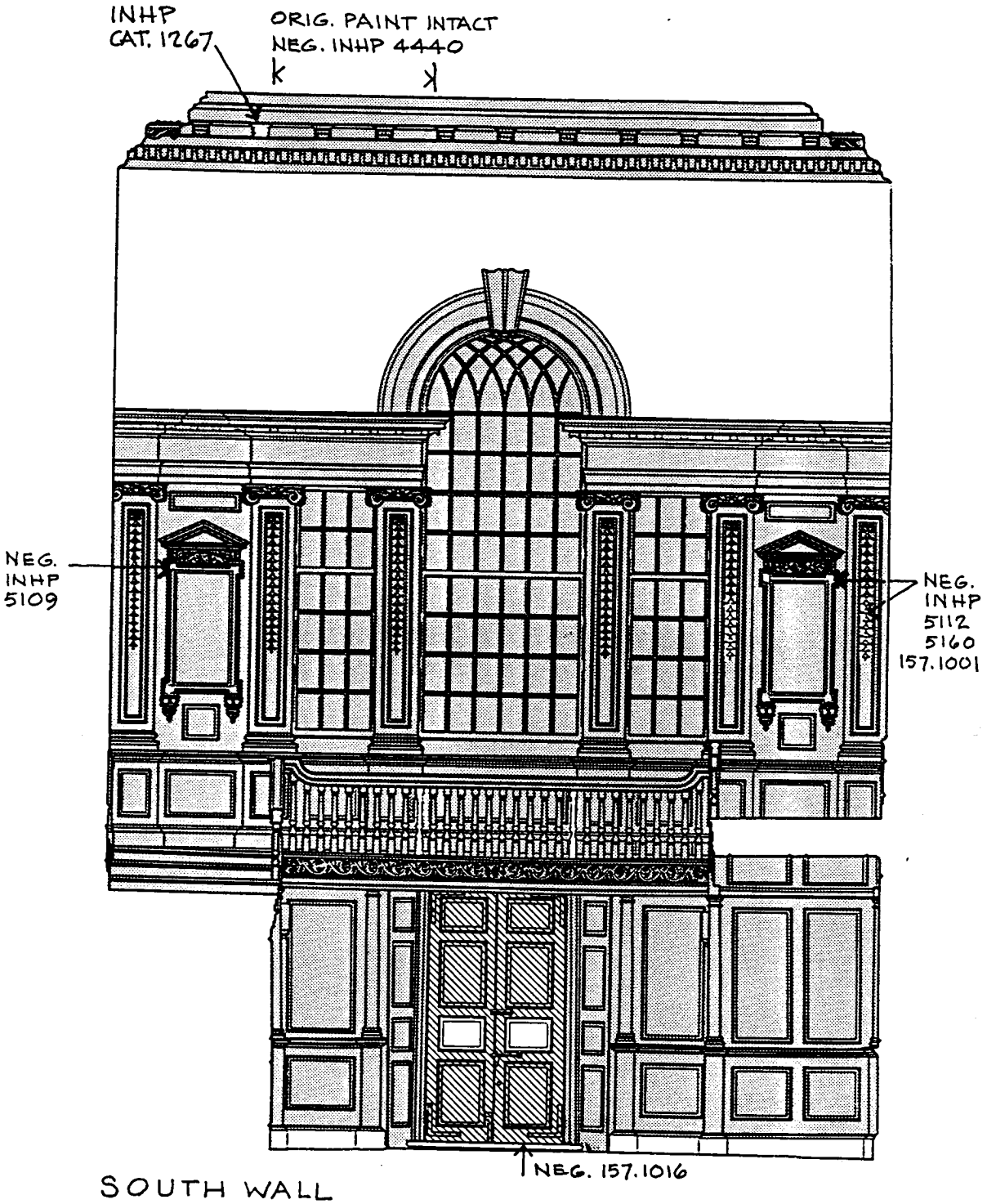


EAST WALL

1750'S WOODWORK
1896 "
1960'S "
UNKNOWN DATE

THE TOWER STAIRHALL
INDEPENDENCE HALL

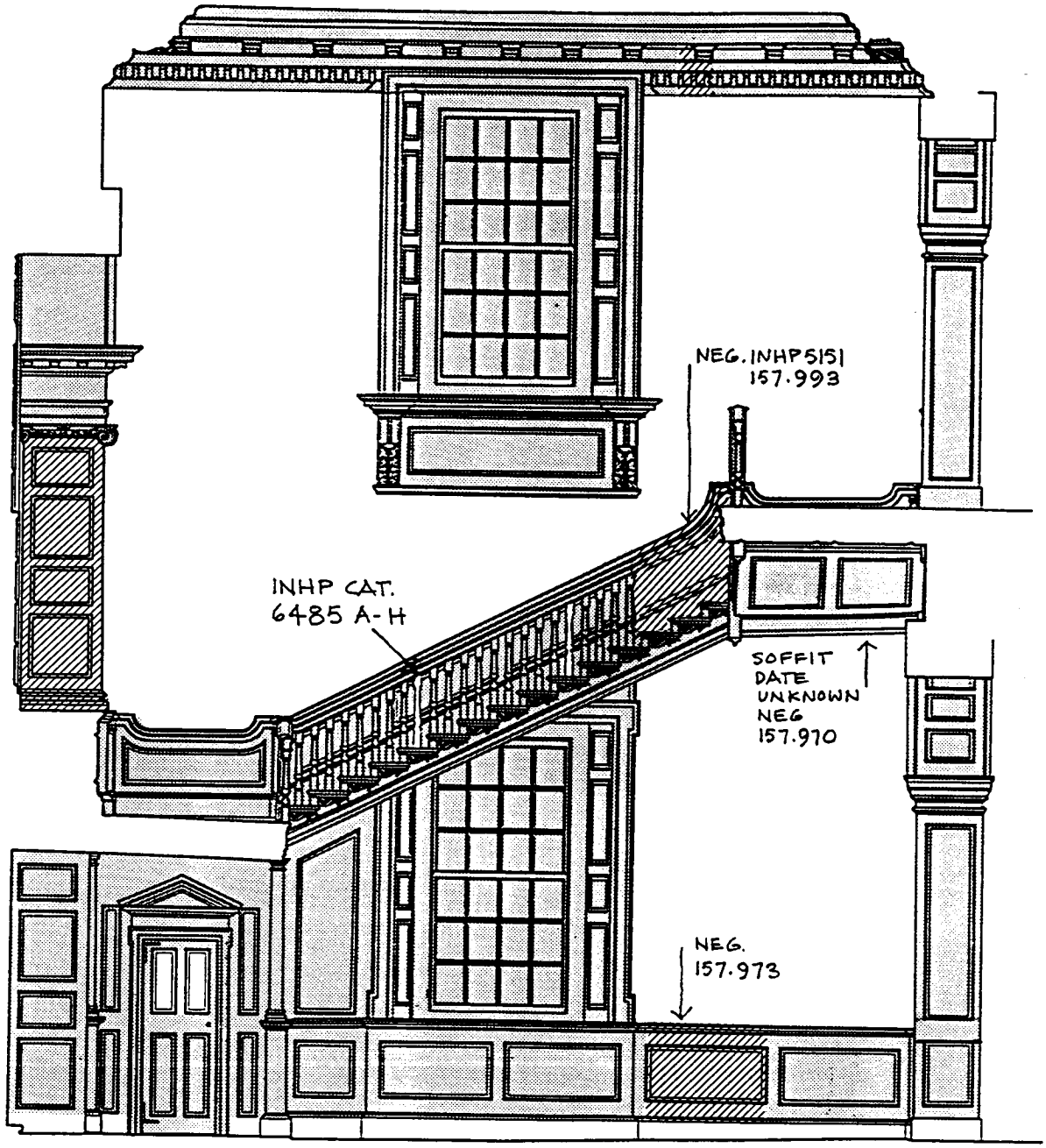
Illustration 12



SOUTH WALL

1750'S WOODWORK
1870'S "
1960'S & 80'S "

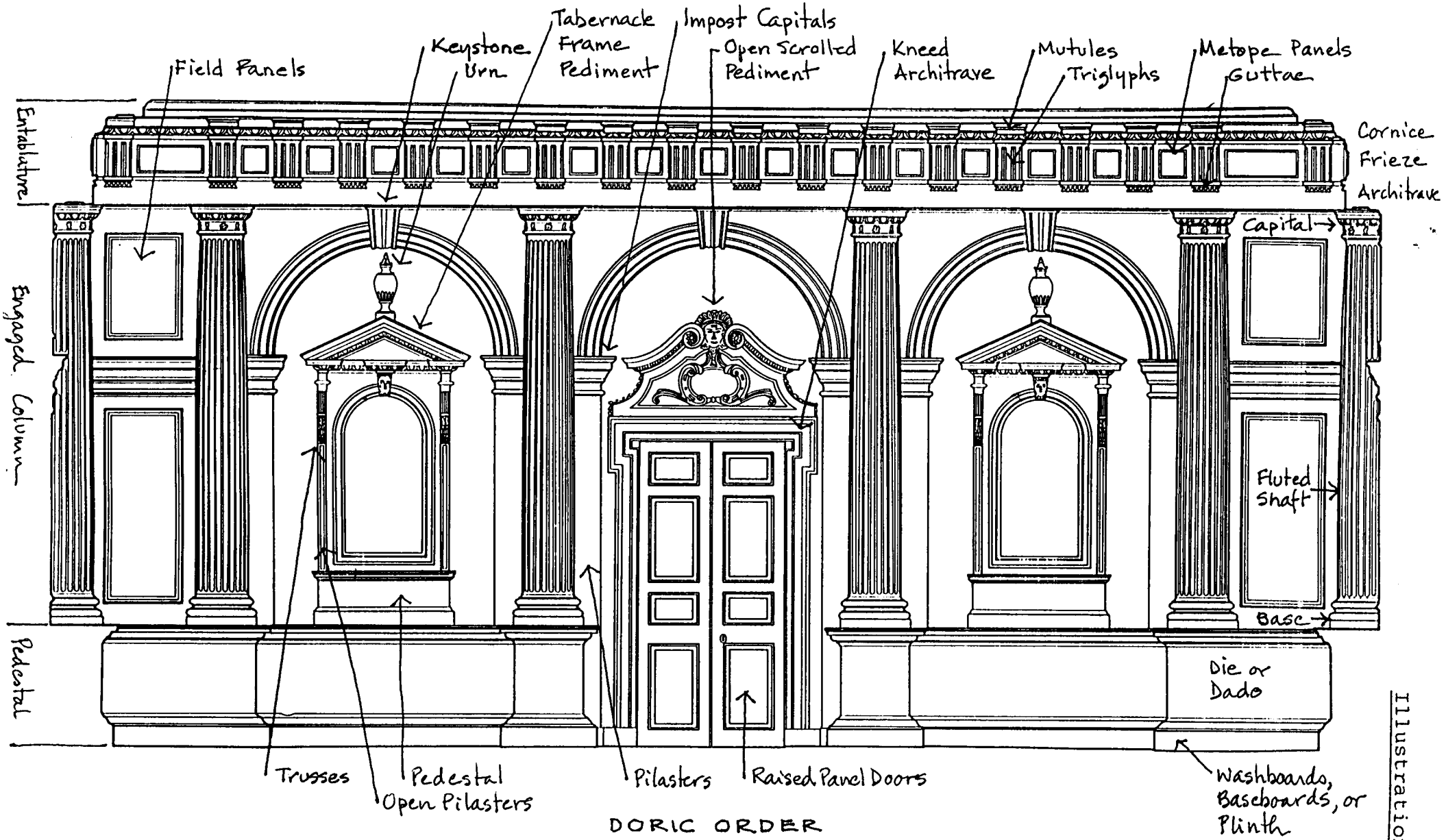
THE TOWER STAIRHALL
INDEPENDENCE HALL



WEST WALL

1750'S WOODWORK
1896 "
1960'S "

THE TOWER STAIRHALL
INDEPENDENCE HALL



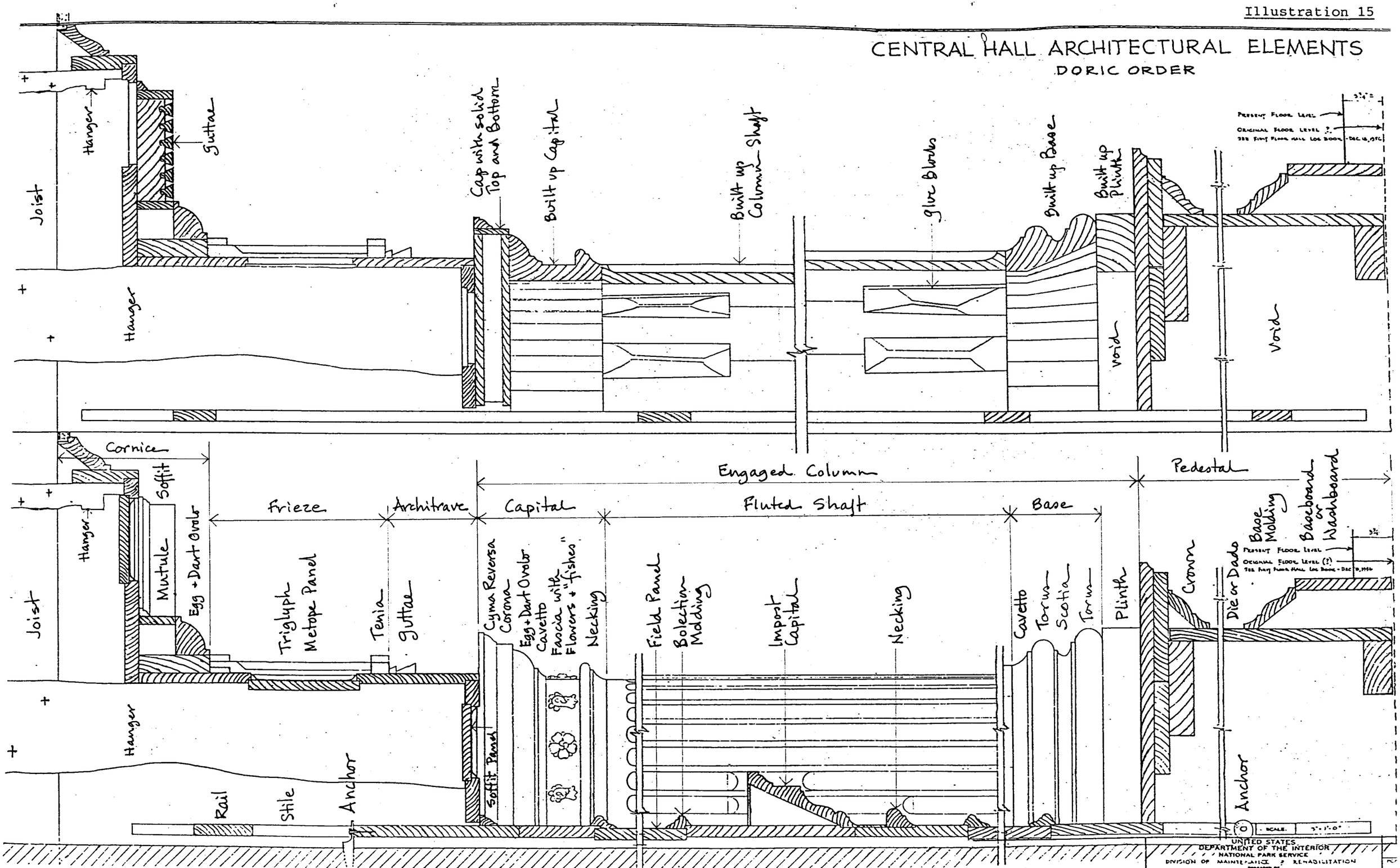
DORIC ORDER

CENTRAL HALL, EAST WALL, ARCHITECTURAL ELEMENTS

Illustration 14

CENTRAL HALL ARCHITECTURAL ELEMENTS

DORIC ORDER



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DIVISION OF MAINTENANCE & REHABILITATION

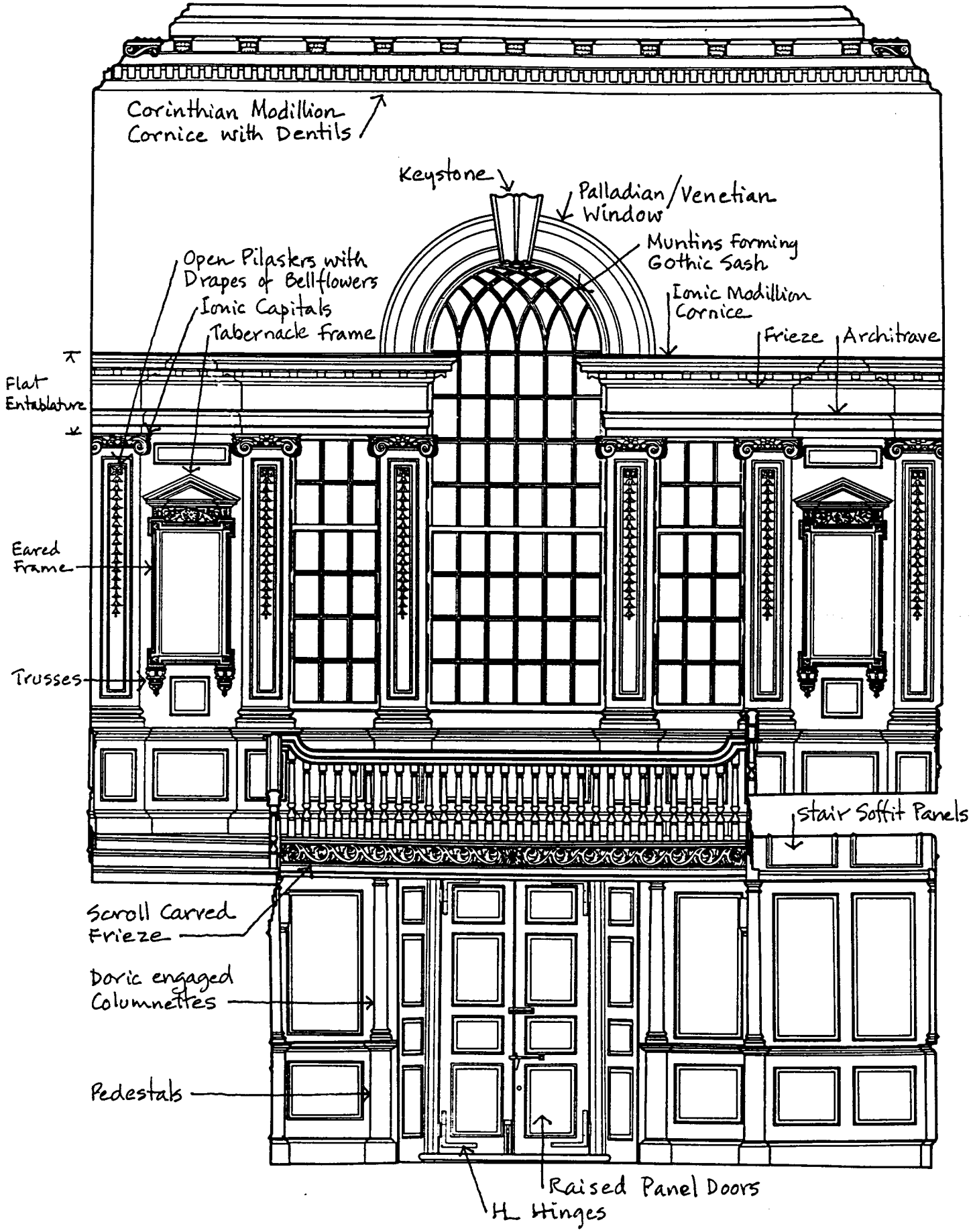
SECTIONS THRU PANELING, NORTH SMALL, FIRST FLOOR HALL

INDEPENDENCE HALL

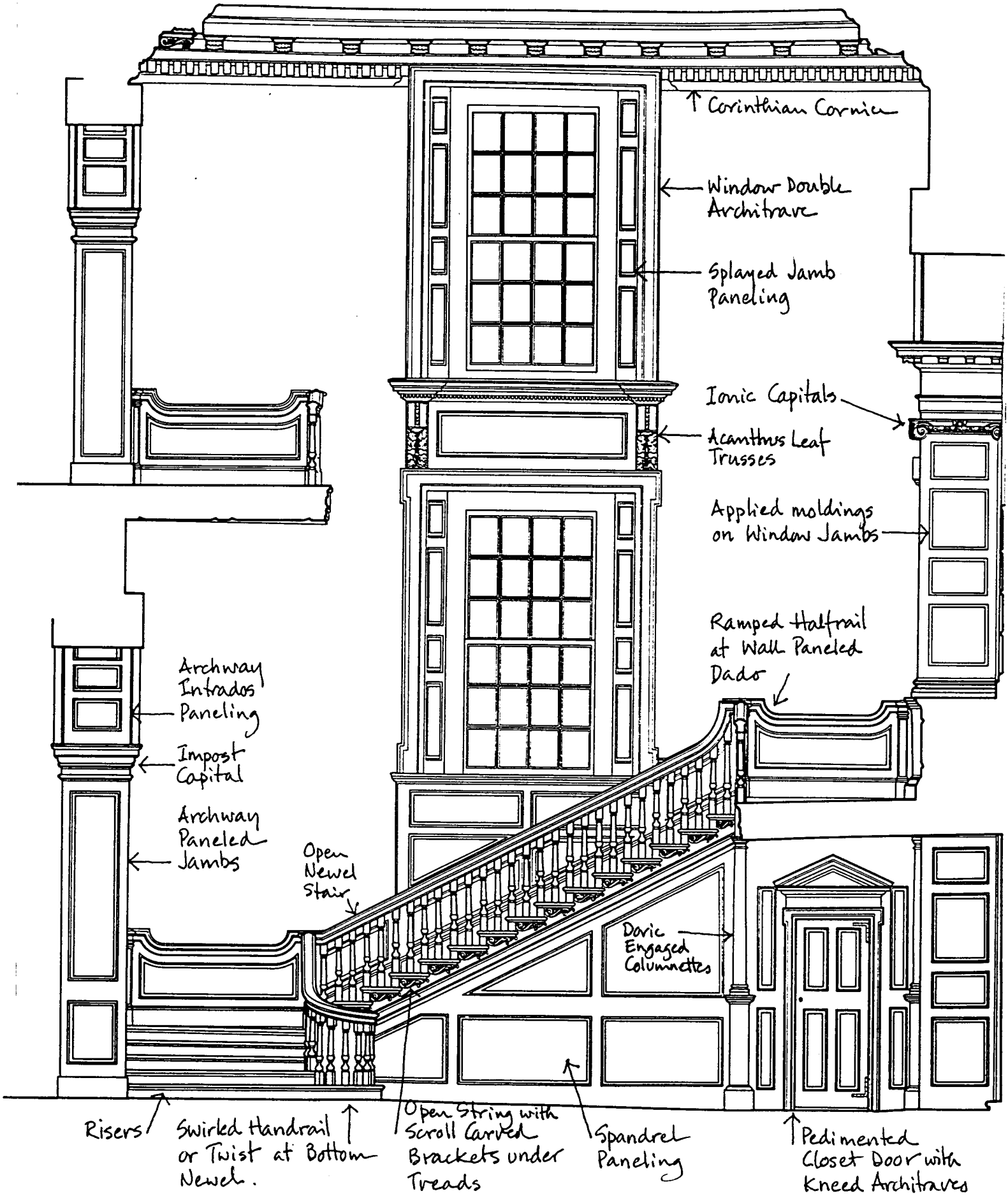
INDEPENDENCE NATIONAL HISTORICAL PARK

NHP IND 2566

BIC DATA
ON MICROFILM
REDUCED SIZE REPRODUCTION



ARCHITECTURAL ELEMENTS
TOWER STAIRHALL, SOUTH WALL



ARCHITECTURAL ELEMENTS
TOWER STAIRHALL, EAST WALL

Illustration 18

Plates 43 and 44 of William Halfpenny's Practical Architecture (2nd ed.; London, 1724).

Master Carpenter Edmund Woolley owned this handy volume and may well have been inspired by this plate of a tabernacle frame when, with the Building Committee, they designed those of the Central Hall flanking the Assembly Room entrance.

A companion plate of a Palladian/Venetian window entitled "A Window from ye Modern Architects" could have given Woolley the confidence that he was supplying the latest fashion for this his largest commission.

43

The following Window or Neath, *is taken from the Works of the* Moderns, *and according thereto y^e* Proportions *are exactly Calculated.*

If the Diameter A is		2-9	3-0	3-3	3-6	3-9	4-0	4-3	4-6	4-9	5-0
Height	B	6-10½	7-6	8-1½	8-9	9-4½	10-0	10-7½	11-3	11-10½	12-6
Plane off Window	C	0-6⅞	0-6¼	0-7⅝	0-7⅞	0-8⅛	0-9	0-9⅜	0-10⅛	0-10⅝	0-11¼
Pilaster	D	0-5½	0-6	0-6½	0-7	0-7½	0-8	0-8½	0-9	0-9½	0-10
Cartouch	E	0-5½	0-6	0-6½	0-7	0-7½	0-8	0-8½	0-9	0-9½	0-10
Height ditto	F	0-11	1-0	1-1	1-2	1-3	1-4	1-5	1-6	1-7	1-8
Cornice	G	0-6⅝	0-7½	0-8⅜	0-8¾	0-9⅜	0-10	0-10⅝	0-11¼	0-11⅞	1-0½
Project^t ditto	H	0-6⅝	0-7½	0-8⅜	0-8¾	0-9½	0-10	0-10⅝	0-11½	0-11⅞	1-0½
Pediment	I	1-1⅜	1-2½	1-3⅝	1-5⅛	1-6⅞	1-8¾	1-10⅝	2-0⅜	2-2¼	2-4⅛	2-6
Stoole	K	2-4⅜	2-7½	2-10⅝	3-0¾	3-3⅛	3-6	3-8⅞	3-11¾	4-1⅝	4-4½
lowered off^s Key	L	0-5½	0-6	0-6½	0-7	0-7½	0-8	0-8½	0-9	0-9½	0-10

when the Height B. is ✕

44

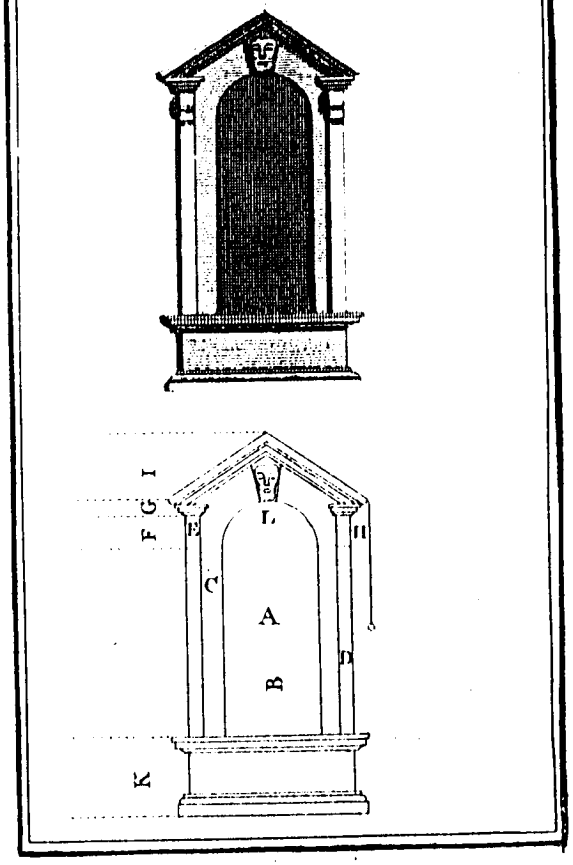


Illustration 18

Illustration 19

Plate 68 of James Gibbs' Book of Architecture ...(London 1728). The 1739 second edition was owned by the Pennsylvania Assembly and would have been readily available to its building committee and master carpenter.

This plate and others may have been the source for many of the architectural features of the 1750s additions to the State House. In this instance, at left, the interior face of the Tower Stairhall Venetian window flanked by paneled frames and seated on a paneled dado is clearly related.

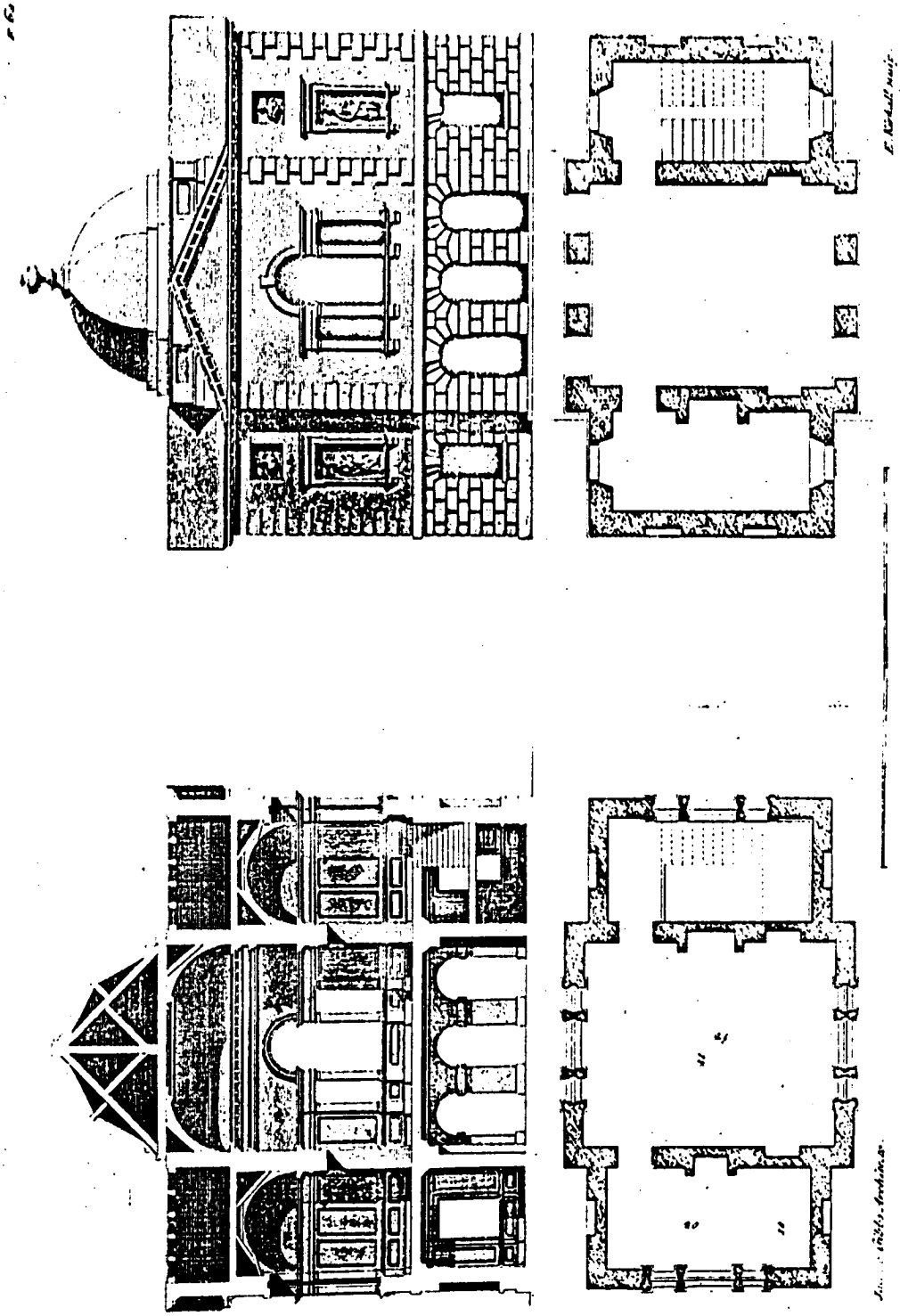


Illustration 20

Plate 106 of James Gibbs' Book of Architecture ...(London 1728). By combining portions of the over-door elements of the center and right-hand designs, one may compose the open-top scrolled pediment with mask and cartouche which is mounted above the Assembly Room entrance in the Central Hall (see Illustrations 21 and 22).

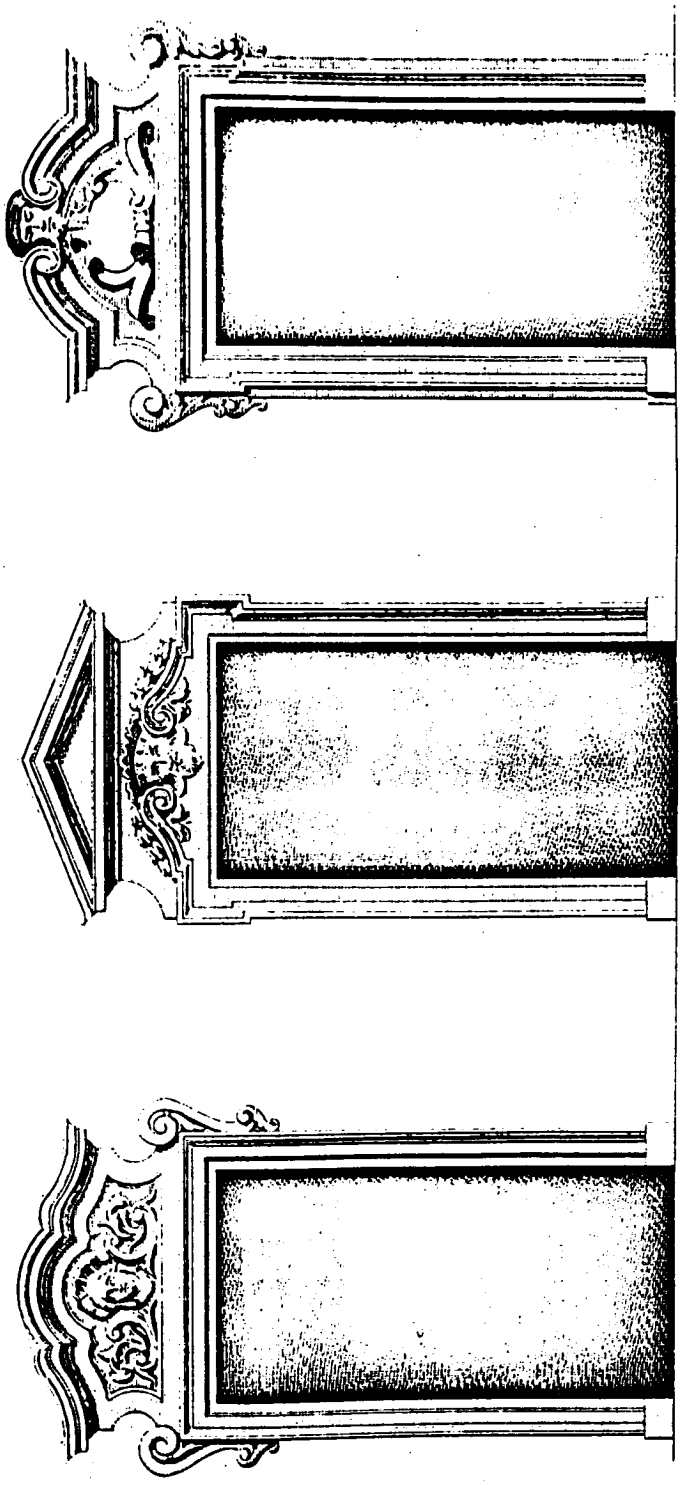
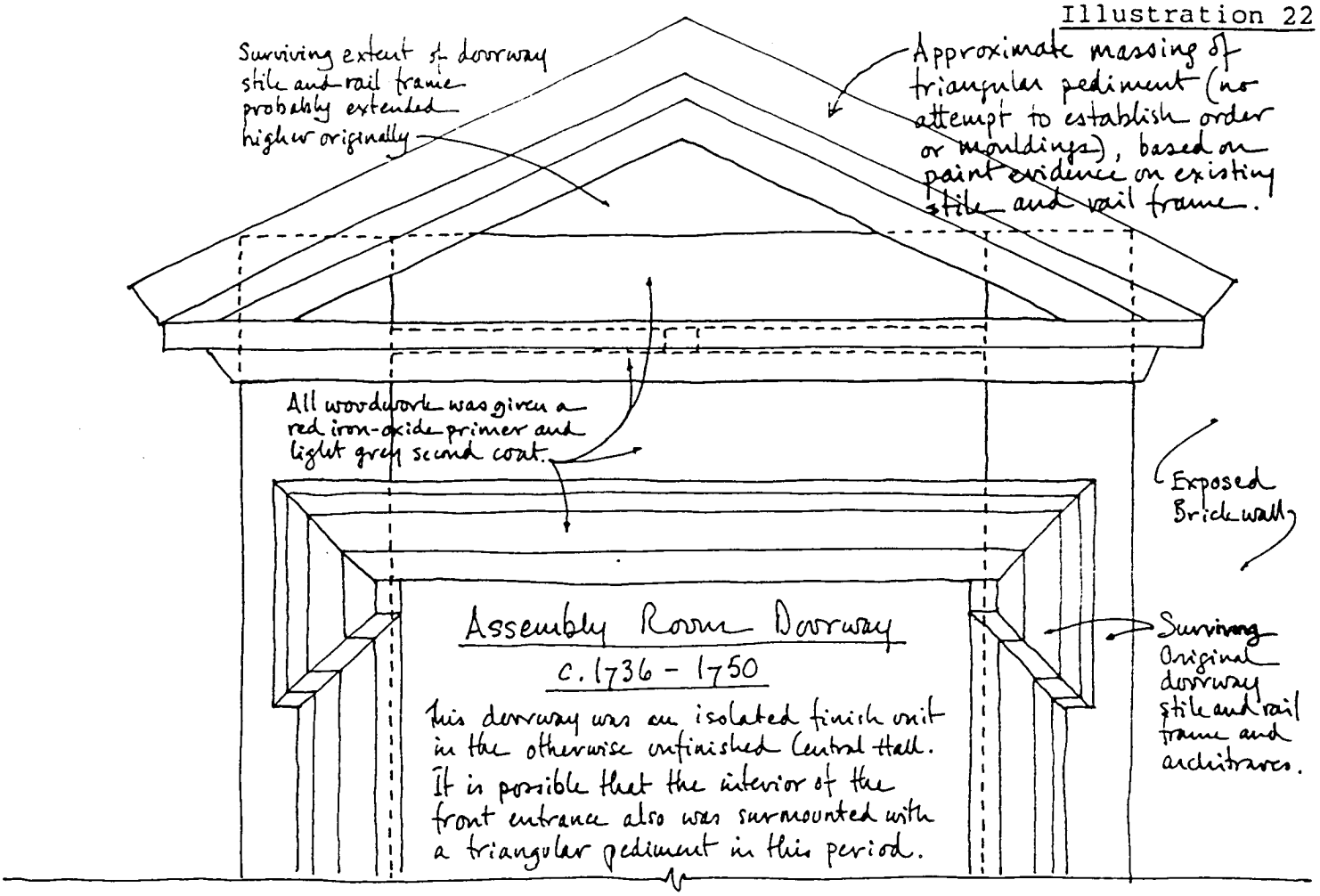


Illustration 21

Central Hall, east wall, open-top scrolled pediment above the Assembly Room Doorway (Historic American Buildings Survey, 1959 photograph by Jack E. Boucher).

Illustration 22 gives the evidence which shows that this pediment was installed above the Assembly Room doorway along with the 1750s woodwork. Not carved by Samuel Harding, it may have been the work of Bryan Wilkinson who in 1756 charged "for carved Work done for the State House " amounting to more than 85 pounds. Unfortunately, his bill is not itemized.




Surviving extent of doorway stile and rail frame probably extended higher originally
Approximate massing of triangular pediment (no attempt to establish order or mouldings), based on paint evidence on existing stile and rail frame.
All woodwork was given a red iron-oxide primer and light grey second coat.
Exposed Brick wall
Surviving original doorway stile and rail frame and architrave.
Assembly Room Doorway
c. 1736 - 1750
This doorway was an isolated finish unit in the otherwise unfinished Central Hall. It is possible that the interior of the front entrance also was surmounted with a triangular pediment in this period.

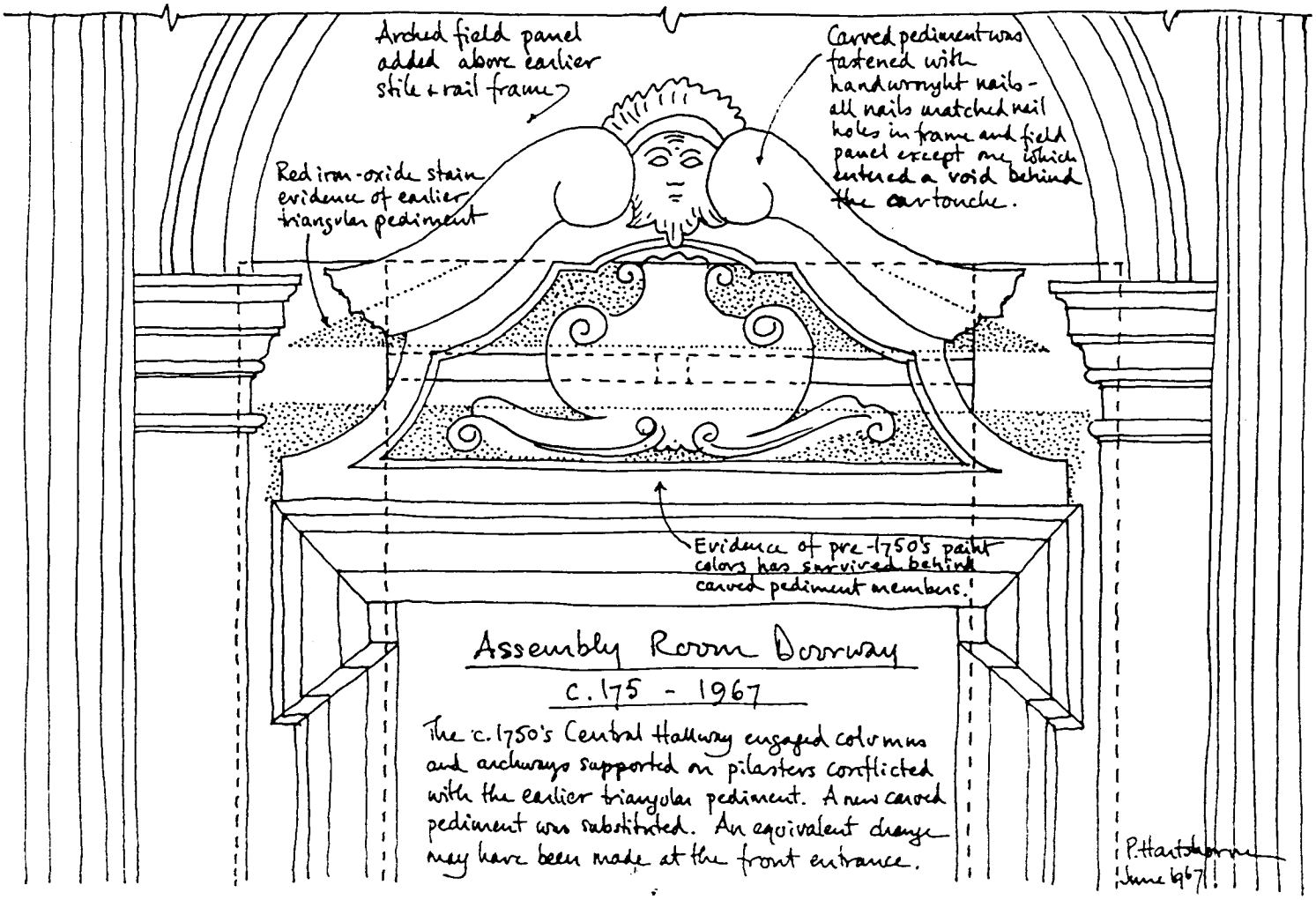

Arched field panel added above earlier stile + rail frame
Carved pediment was fastened with handwrought nails - all nails matched nail holes in frame and field panel except one which entered a void behind the cartouche.
Red iron-oxide stain evidence of earlier triangular pediment
Evidence of pre-1750's paint colors has survived behind carved pediment members.
Assembly Room Doorway
c. 175 - 1967
The c. 1750's Central Hallway engaged columns and archways supported on pilasters conflicted with the earlier triangular pediment. A new carved pediment was substituted. An equivalent change may have been made at the front entrance.
P. Hartshorne
June 1967

Illustration 23

Samuel Harding's carved mask, or face, from the Central Hall east wall south tabernacle frame. Harding lists this work: "two pedements frames in ye Pasage one on each Side of the door to two kestones [keystones] for ditto frames With fases [faces]..."

Photographed after the accumulated paint layers were removed, Harding's detail work has the exaggeration needed to be clearly seen ten feet above the floor.

(Historic American Buildings Survey 1959 photograph by Jack E. Boucher).

Illustration 23



Illustration 24

In 1755 Samuel Harding did the carving for the two Central Hall east wall tabernacle frames. This detail shows one of the "4 truses [brackets] for ye ditto frames" for which he charged "one pound pr truss."

(Historic American Buildings Survey 1959 photograph, by Jack E. Boucher, INHP negative 6050.)

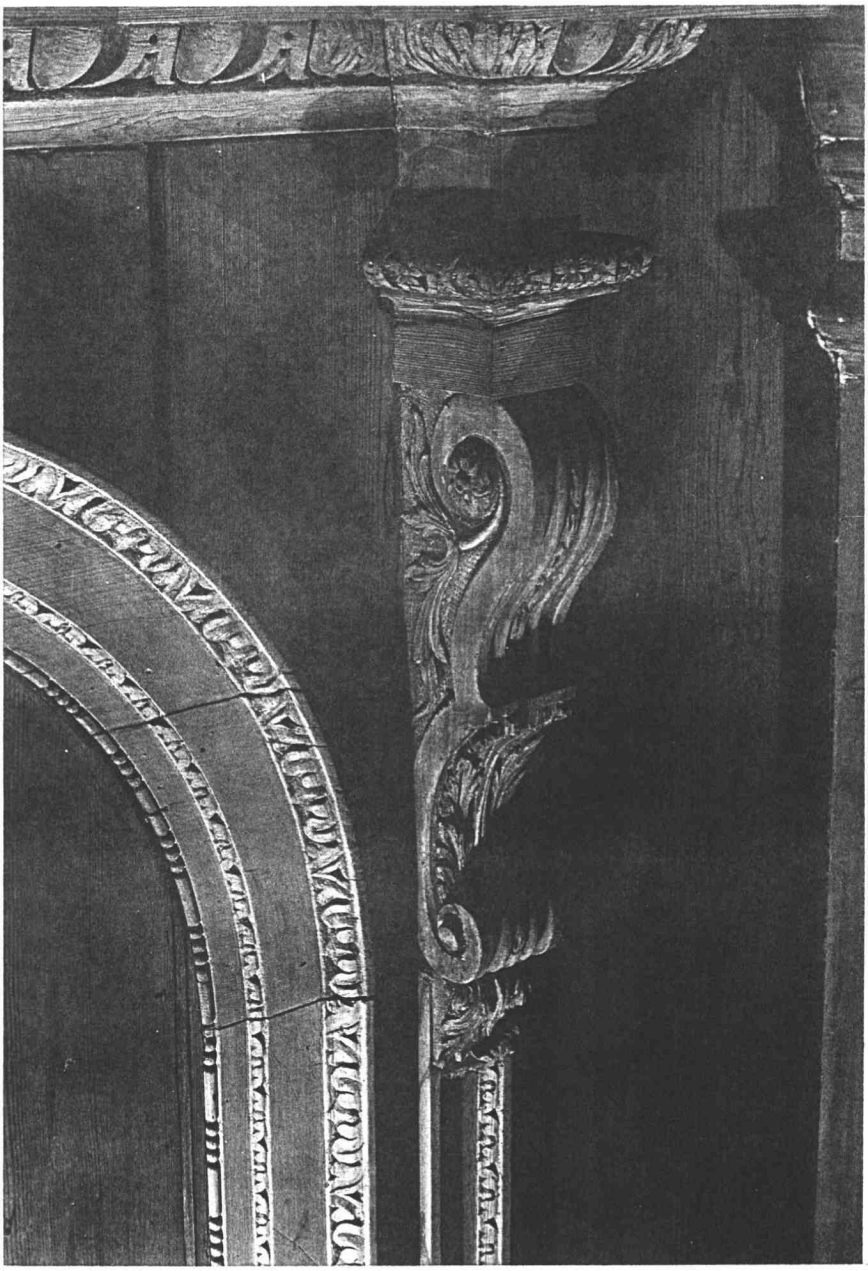


Illustration 25

Found in 1956 behind the woodwork in the southwest corner of the Central Hall, this leaf carved cyma reversa molding was possibly an extra length broken in three pieces and discarded during construction. Samuel Harding's Account describes the molding: "to 53 Mundulyouns [mutules] in ye passage Carved With three leaf grass 3 foot in each at 4d pr foot."

Never having had paint on its surface, Harding's chisel cuts are clear.

See INDE-1258, and negatives 157.1958 & 1959, by James L Dillon & Co., 1965.

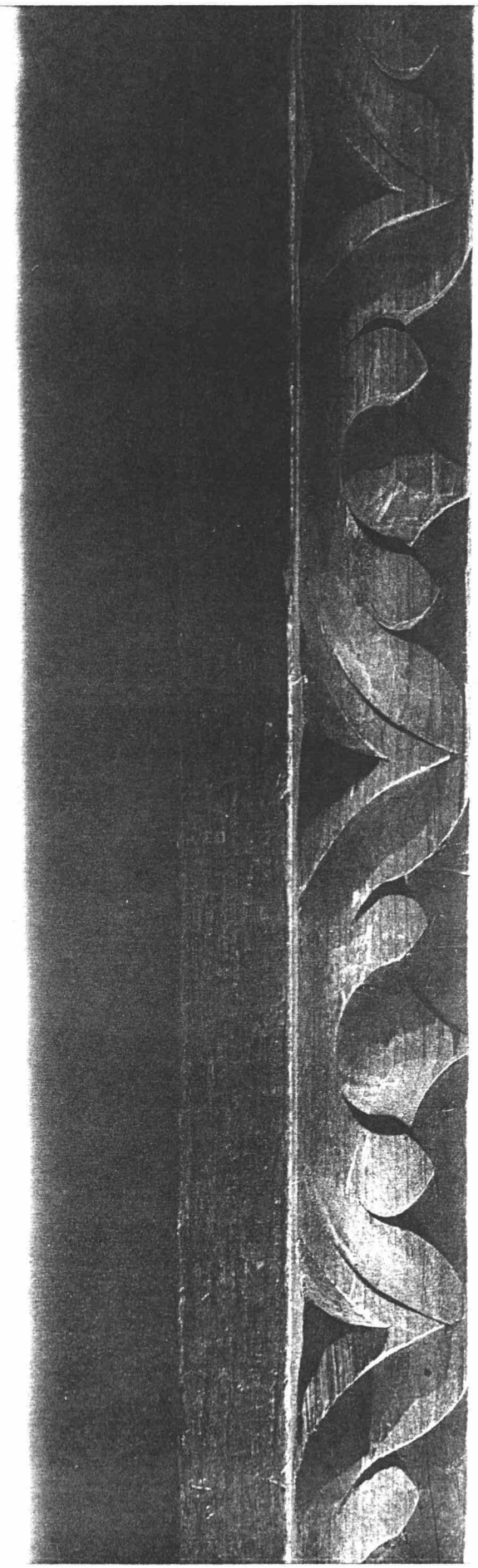


Illustration 26

Some of Samuel Harding's best carved work is in the friezes on the stair landings of the Tower Stairhall. They are listed in his 1755 account: "to 2 freses 37 foot at 4s pr foot for ditto Stair Case" (Historic American Buildings, 1959 photograph, by Jack E. Boucher).

Illustration 26

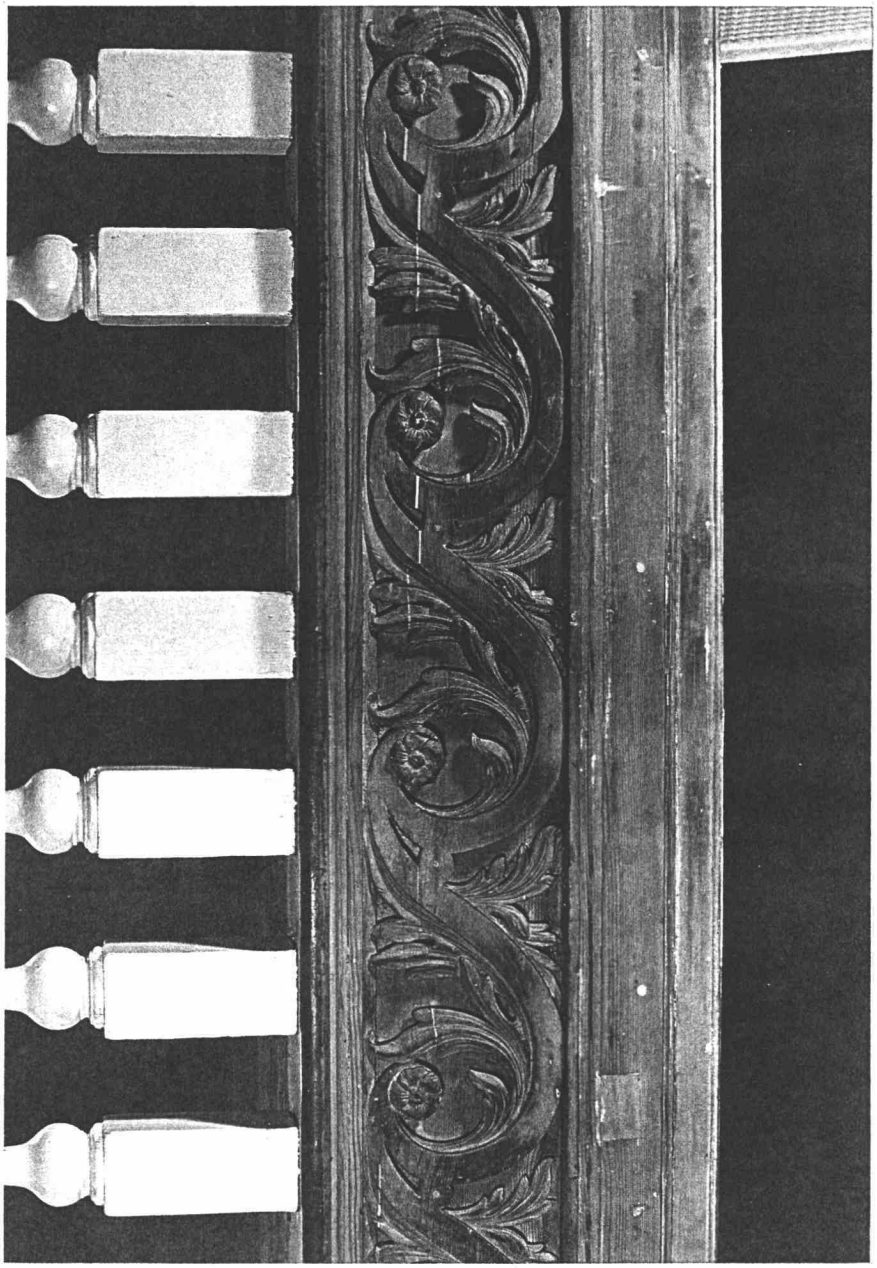


Illustration 27

Samuel Harding's account includes "The Carven [carving] of 2 tabernackels [tabernacle] frames one of each Side of the Venneshon Winder [Venetian window]...to 4 Small trusses for ditto frames at 5s pr trus... to 2 freses [friezes] for ditto frames at [1 pound] pr frame...to 8 flowers for ditto frames at 2s pr flower." Harding did all the carving shown except the "flowers" which are later replacements.

(Historic American Buildings Survey, 1959 photograph by Jack E. Boucher).

Illustration 27

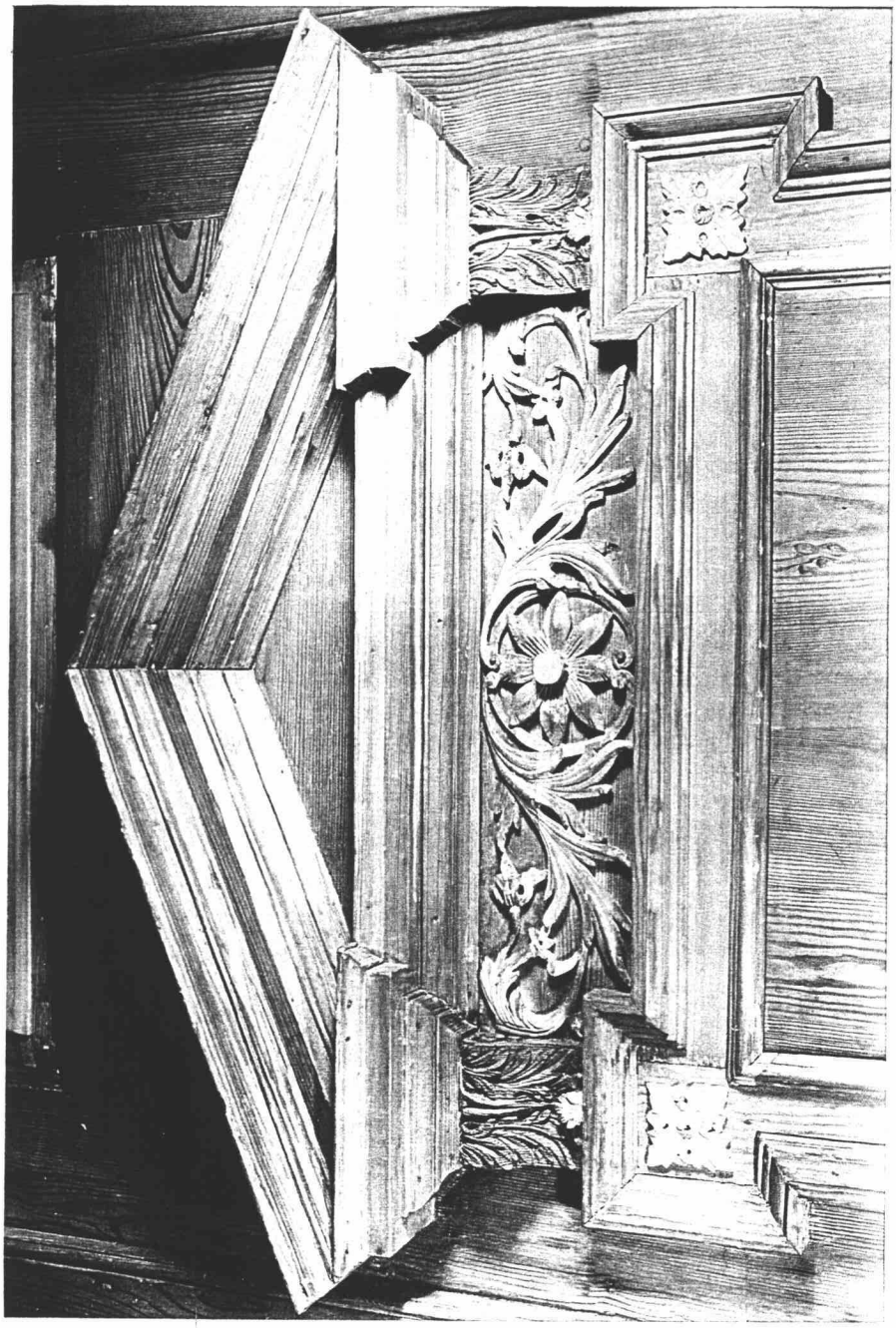


Illustration 28

For the open pilasters which flank the Tower Stairhall Venetian window and its tabernacle frames, Harding carved "to 6 draps [drapes or drops] of husks for the open plasters ye side of the ditto Winders at 12s pr drap" (Historic American Building Survey, 1959 photograph by Jack E. Boucher, INHP negative 6012).

Outlines for missing similar drapes of husks were found in the open pilasters of the archway leading into the second floor rooms at the top landing. The National Park Service copied Harding's originals in restoring the missing detail.

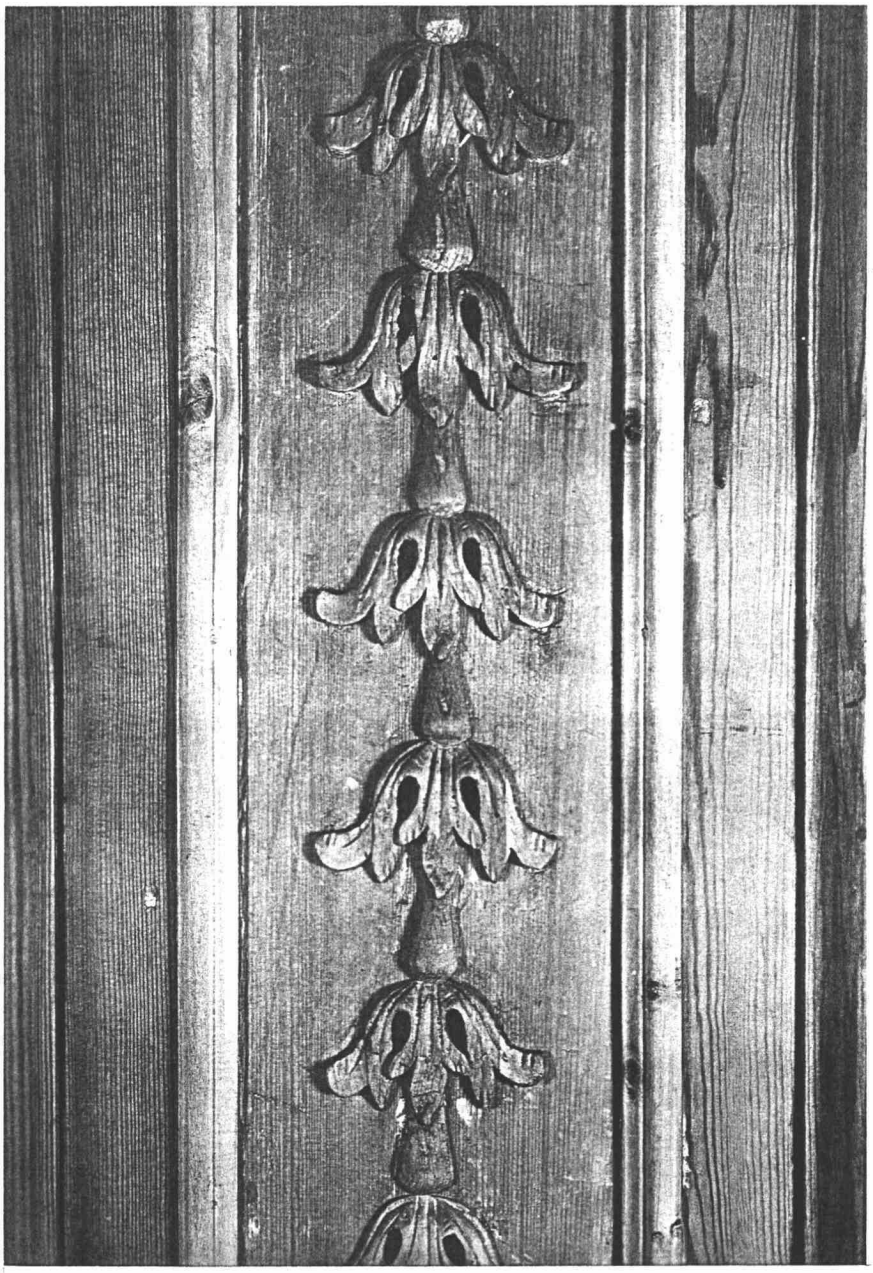


Illustration 29

Central Hall plaster ceiling medallion, 1816, "one grand Rosett and Goloichie ...$2.50;" the work of William Thackara, Jr.

The oldest ceiling in Independence Hall; there was no question that the ceiling, its decorative medallion and ribbon border should be preserved.

Historic American Buildings Survey T-62, 1959, photograph by J. E. Boucher.

Illustration 29

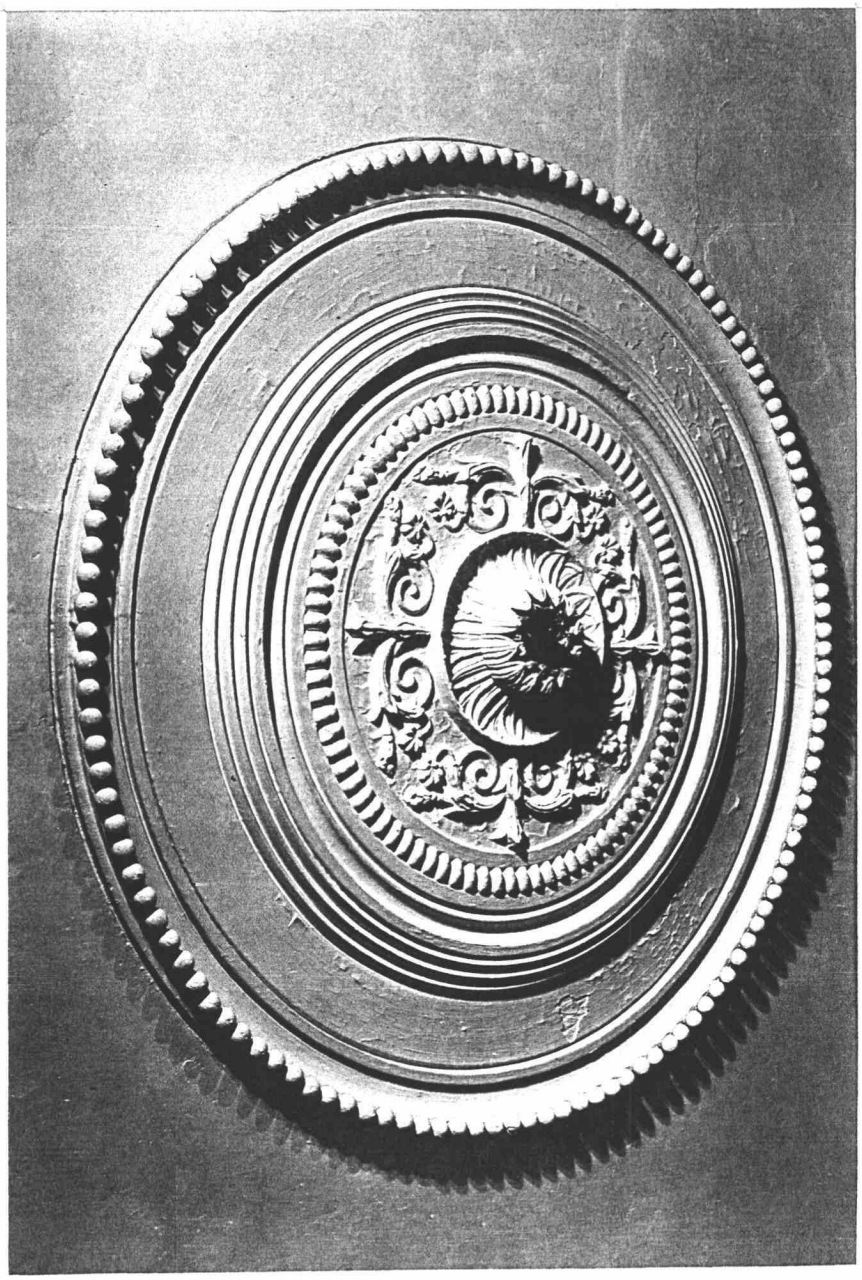


Illustration 30

"Vestibule of Independence Hall - 1869," Albumen print by John Moran, published by Kenneth Finkel in Nineteenth Century Photography in Philadelphia, (New York: Dover Publications, Inc.,1980), Figure 77.

Of particular interest here is the enormous gaslight fixture sitting on the stair newel post. Two years after this photograph was taken Mr. E. L. Henry wrote to Frank M. Etting about possible restorations to make for the Centennial: "I would beg you to try and have that ugly looking lamp at the foot of the stairway removed and one in keeping with the style of that period put in its place." (Ind. Hall vol. 1, Correspondence, 80, Etting Collection, HSP, July 8, 1871.) The lantern and the top of its post were removed by 1896 and replaced with a candelabra (see INHP negative 1633). The entire standard was removed during the 1898 restoration.

Note also the crowd control gate at the first landing, the contrasting valued paint colors, the 1854 stone flooring, the c. 1816 north entrance with fanlight, and the c. 1816 Central Hall plaster ceiling which survives today as the oldest ceiling in Independence Hall.

Illustration 30

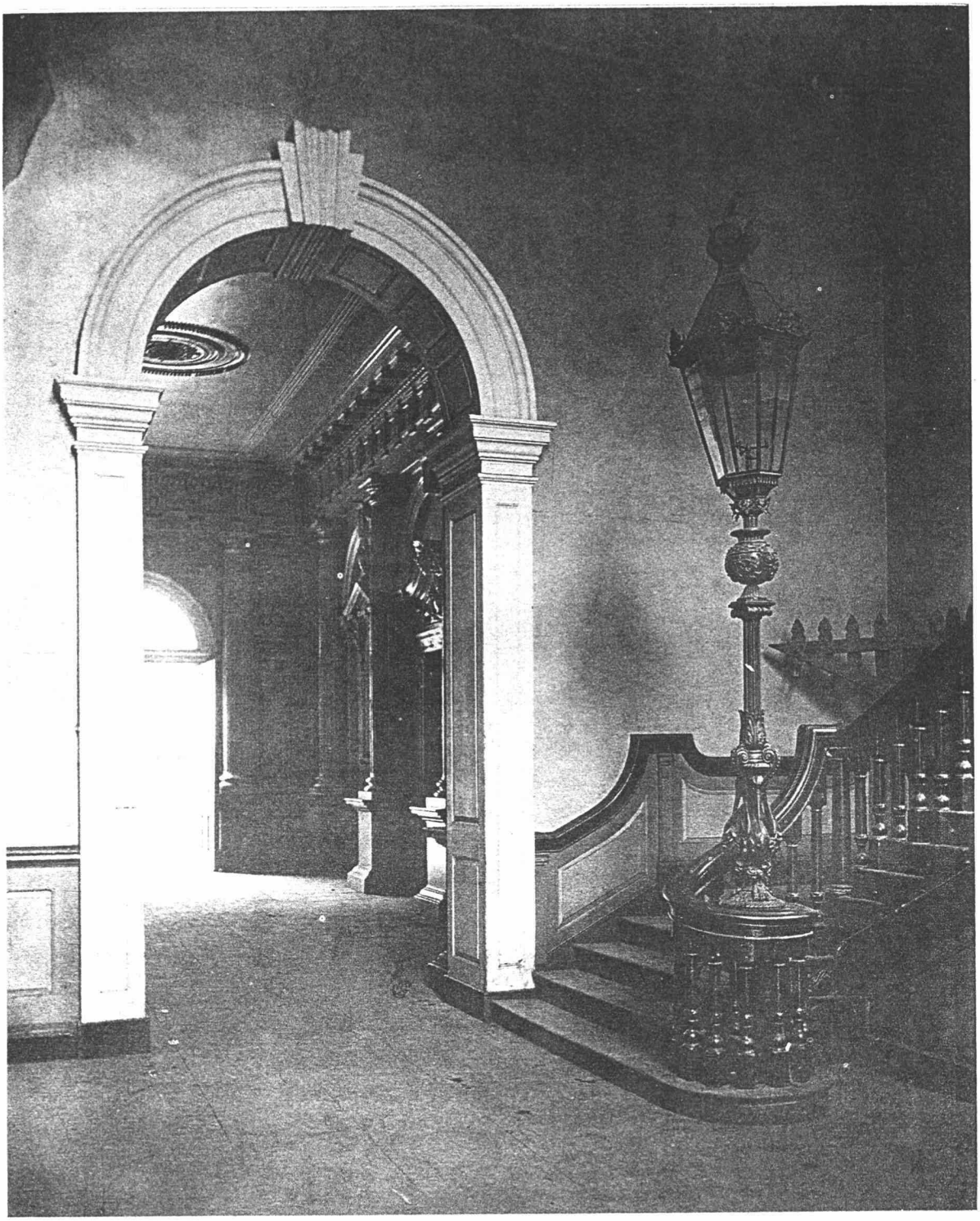


Illustration 31

Circa 1896 view of the north end of the Central Hall taken by W. H. Rau (INHP negative 1635). Of particular note are the c. 1816 entrance doors with line-weight and pulley closers and fanlight, the late nineteenth century chandelier, the 1850s stone flooring, the washboards painted with a dark color such as was done in the eighteenth century, the Centennial period barriers around the walls, and the Centennial reproductions of the tabernacle frames installed in the archways to the Supreme Court Room, which had been closed since 1789.

The open-top scroll pediment with mask and cartouche above the Assembly Room doorway to the right dates from at least the 1750s (see Illustration 5). The matching pediment above the Supreme Court Room entrance has proved to be from the early nineteenth century, probably c. 1816. It is now above the north entrance.

Illustration 31

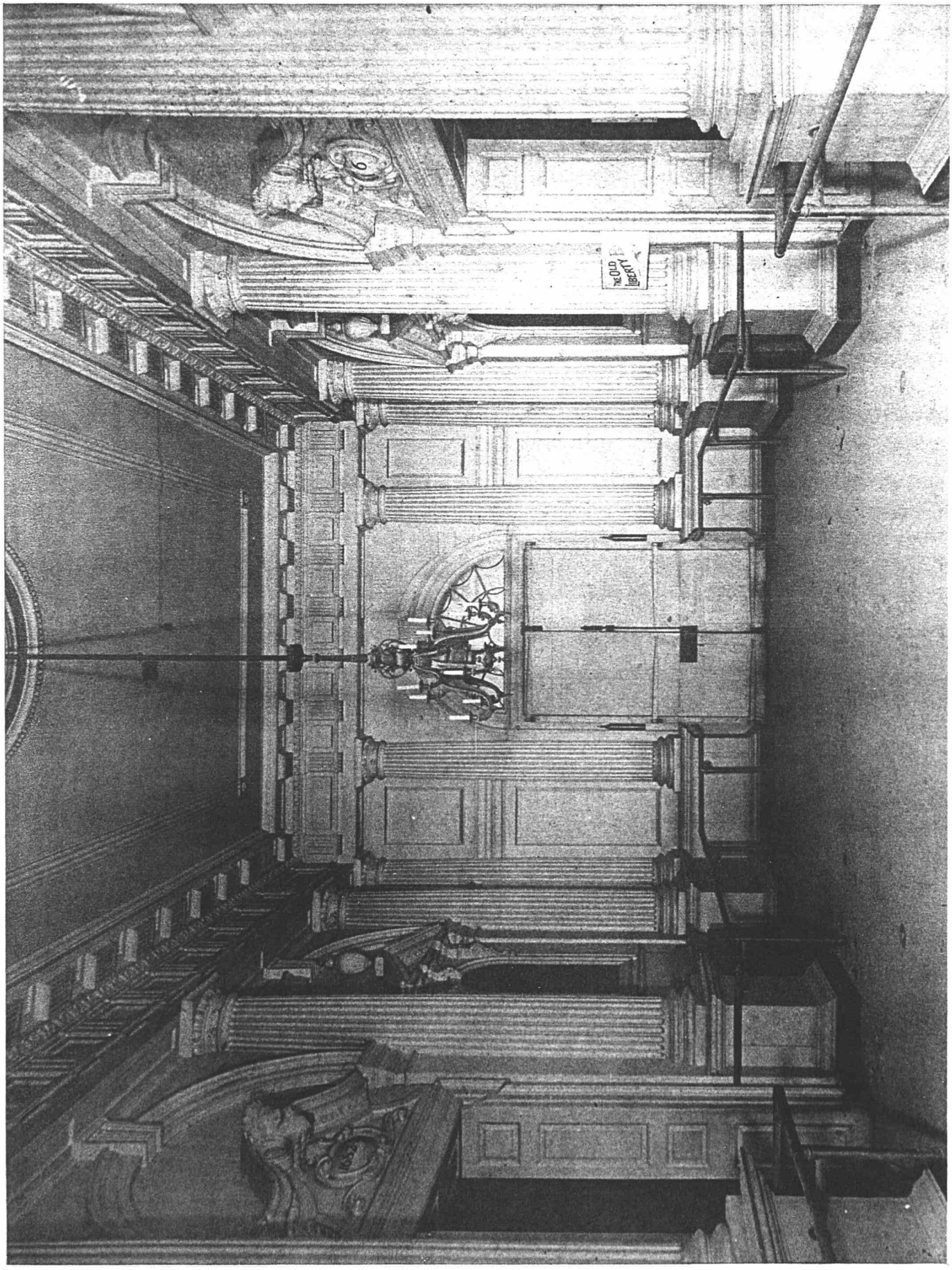


Illustration 32

Circa 1896 view looking east in the Tower Stairhall, taken by W. H. Rau (INHP negative 1642). To the left of the windows can be seen one of the two clock weight chutes. These descended to grade from the nineteenth century tower clock works, the chutes having been cut through the main cornice and the stair woodwork below.

At left one can see part of the stair that from 1854 until 1922 provided access to the tower and garret. This stair included portions of the original 1750s stair which previous to 1854 led up from the second floor Lobby. The relocation of the Lobby stair in 1854 is corroborated by a news article (Public Ledger, August 29, 1854) "The stairs leading to the steeple have been replaced by another flight within the tower."

The closet beneath the landing apparently contained either a WC or sink. On Dec. 21, 1874 a "water pipe in the closet on the second floor at the foot of the stairway" needed "immediate repair" (Journal of Common Council 1874, II, 460, App. 357). There was precedent for having a W.C. here, as on Feb. 9, 1785 it was recommended "Making a water closet on the landing of the stairs."

Also of note in this view are the contrasting paint color values. The stair wainscot appears to be grained in imitation of wood. The paneling is highlighted with a lighter color on the raised panel tongues.

At the lower window a barrier was mounted to keep visitors from clambering onto the broad sill. This explains why the National Park Service found a second sill over the much worn original and why the original had to be repaired when the protective layer was removed.

Illustration 32

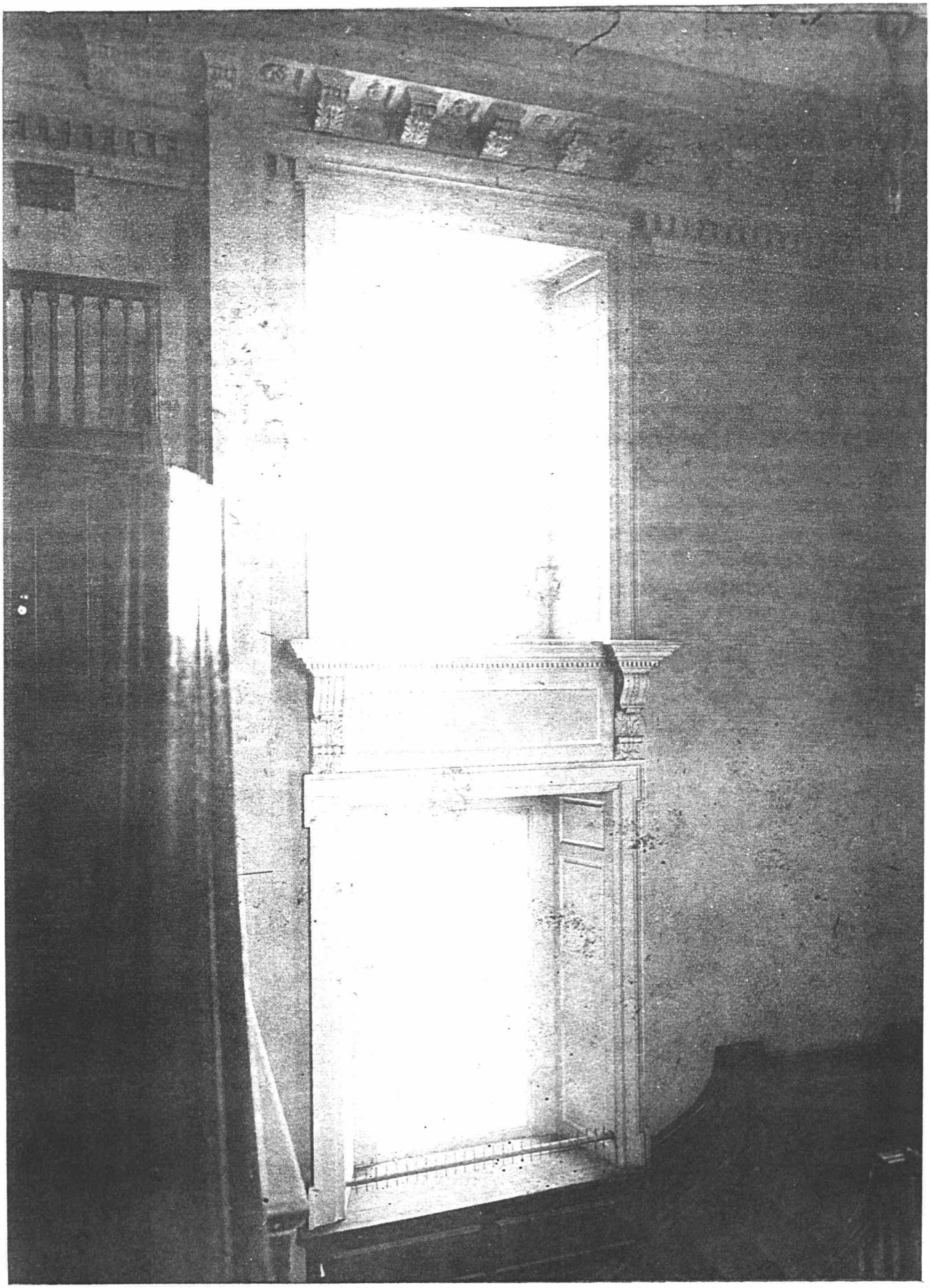


Illustration 33

Central Hall, southwest corner, Dec. 20, 1897. Photograph by W. H. Rau (INHP negative 1637) showing Architect T. Mellon Rogers' restoration in progress.

At left are the Central Hall 1876 tabernacle frames and the early nineteenth century open-top scrolled pediment which had just been removed along with the 1789 partitions that closed the archways leading to the Supreme Court Room.

Through the archway the view records a new lowered ceiling and a modified cornice under construction in the court room.

Unfortunately Rogers had no interest in the paint color history of the building. He had the perfect opportunity to study the original colors on the archway intrados paneling which for so many years had been protected by the partition enclosures.

Illustration 33



Illustration 34

Central Hall looking north, 1898. Photograph by W. H. Rau showing the completed restoration by Architect T. Mellon Rogers (INHP negative 1636).

Borrowed light once again comes from the Supreme Court Room, and the wide 1816 fanlighted north entrance has been changed to more closely resemble the original double doors surrounded by eared double architraves. The open-top scrolled pediment above the newly restored entrance was moved here by Rogers from the archway opposite the original 1750s pediment over the Assembly Room doorway at right (see Illustration 31). A discussion of this pediment is in the report chapter "Alterations Made Over the Years in the Central Hall and Tower Stairhall - Nineteenth Century Alterations."

Note also that Rogers retained the 1816 plaster ceiling with center medallion and surrounding ribbon, laid a new brick floor, painted the washboards with the overall woodwork color, and retained the 1876 dark inscriptions within the tabernacle frames.

Illustration 34

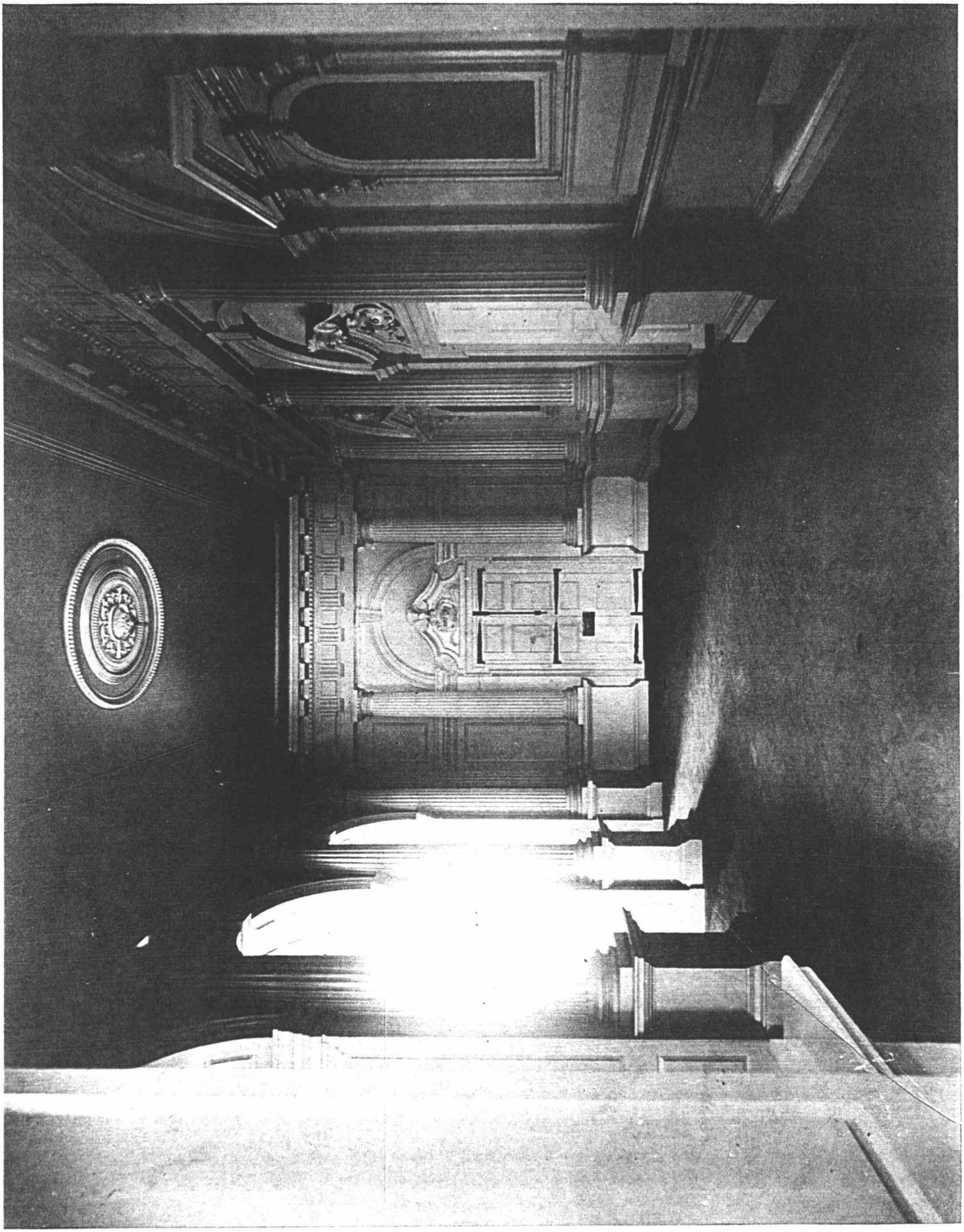


Illustration 35

Central Hall and Tower Stairhall 1900-1919, Horace Wells Sellers Collection. Photographer possibly Philip B. Wallace.

This vertical image conveys well the grandeur of these two spaces. The Liberty Bell hanging from its yoke, on wishbone shaped supports, within a large decorated glass case, made a formidable impact on the Tower Stairhall; so much so that by the 1930s the outer case was removed, undoubtedly to make more room for visitors.

What looks to be a fire call box has been practically, but unsympathetically, hung from the original paneling at the southeast closet door.

The low first riser of the stair demonstrates clearly the error of the high level 1898 restoration brick floor.

Illustration 35



Illustration 36

"Bell Tower Room decorated for General Pershing's visit Sep. 11, 1919," INHP negative 16152.

Note amongst the greenery, flags and Persian rugs: the white enamel paint throughout, the high level of the 1896 brick flooring evidenced by the short first riser of the stair, the visitor control rope hanging at the archway as it does today, and an early electric light over the Liberty Bell, hung from a knob and tube wiring system. This was an illustration in the Annual Report of the Department of Public Works of the City of Philadelphia ... Dec. 31, 1918. Appendix 2, National Museum Independence Hall Group ... Wilfred Jordan, Curator, Independence Hall ... p. 344.

Illustration 36



Illustration 37

Tower Stairhall, northeast corner, 1900-1919, Horace Wells Sellers Collection. Photographer possibly P. B. Wallace.

The exuberant swirl of the handsome handrail at the bottom newel anchors this grand and gracious stair. With exception to the treads, risers and the landing flooring, the stair as shown is largely original.

Judging by the folding rule laid against the stair spandrel, this photograph was possibly made c. 1918 when the Philadelphia Chapter of the American Institute of Architects was making measured drawings of the building.

Illustration 37



Illustration 38

Tower Stairhall, south wall, west tabernacle frame, 1900-1919, Horace Wells Sellers Collection, photographer probably Philip B. Wallace.

Except for the flowers in the tabernacle frame ears which are 1898 replacements, the high relief of Samuel Harding's carving, contrasts well in this raking light. And the 1876 inscribed panel makes the tabernacle frame stand out strongly. As paint was removed and renewed on this woodwork for the 1876 Centennial Celebration, no evidence survives to indicate if these field panels were originally given a special treatment.

Illustration 38

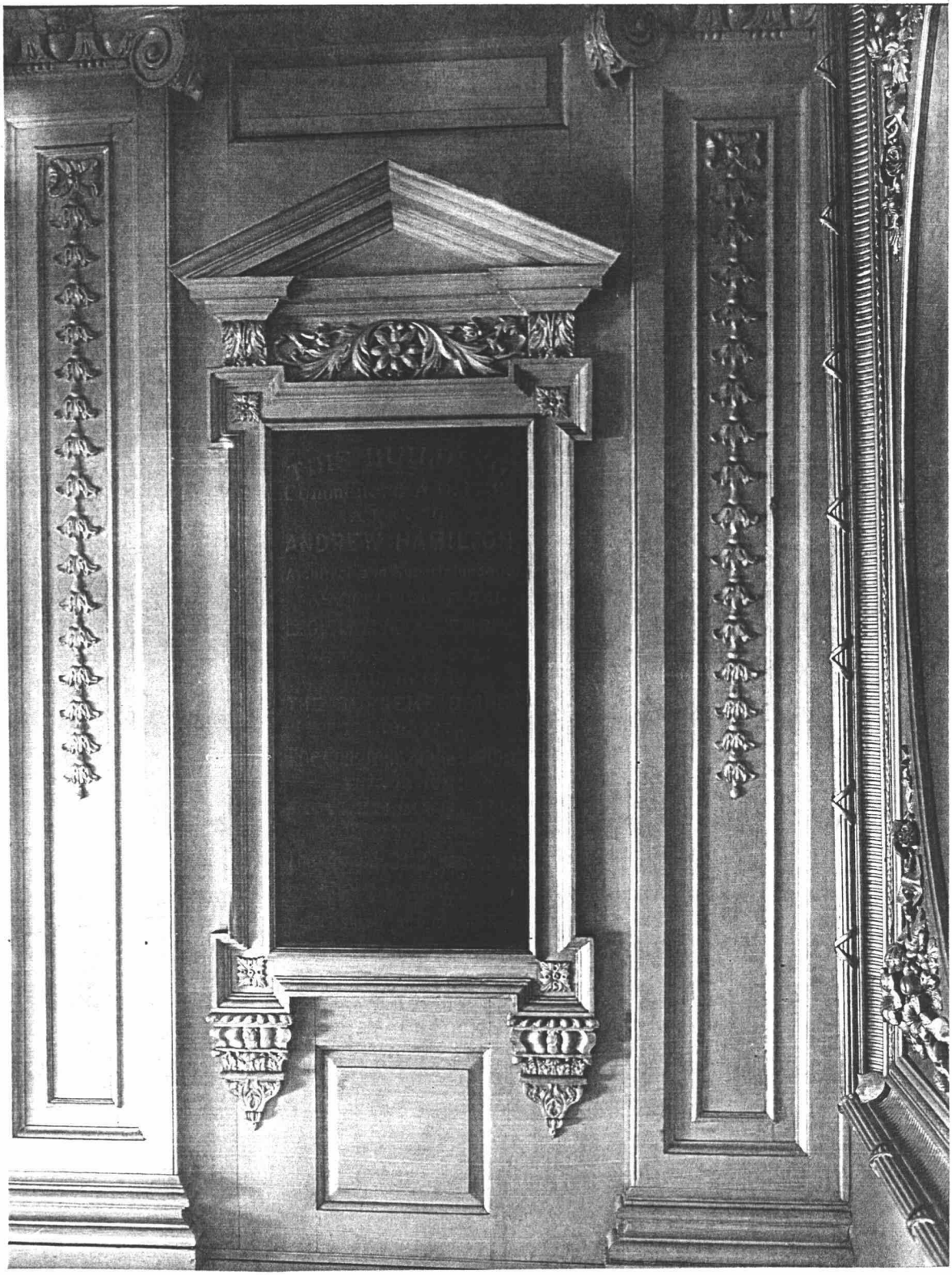


Illustration 39

Tower Stairhall, northeast corner, upper landing, 1900-1919, by Philip B. Wallace.

Architect T. Mellon Rogers in 1898 restored the second floor room layout, but did not go so far as to move this stair back to its original position in the second floor lobby. Rogers did remove a closet under its small landing, (see Illustration 32) and apparently conveyed light to the upper flights through a glass paneled door.

Although this is a black and white photograph, one can see that it was Rogers who introduced the era of white enamel woodwork.

Illustration 39

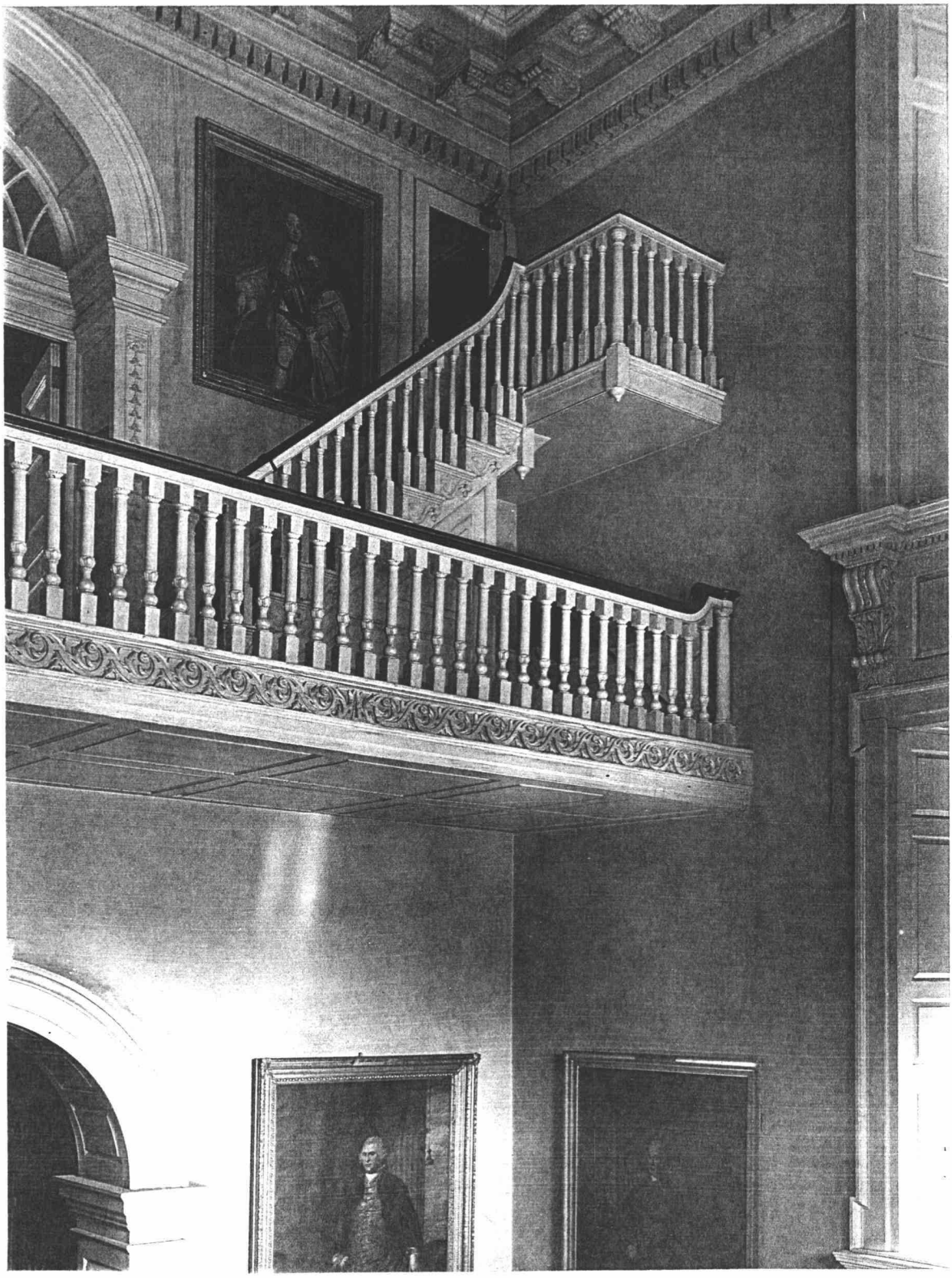


Illustration 40

The top landing of the Tower Stairhall, May 15, 1922 (INHP 18936).

This small stair was built in 1854. In 1898 architect T. Mellon Rogers cleaned it up by removing the closet under the landing shown in Illustration 32. The stair was removed entirely in 1922 when the American Institute of Architects' reconstructed the 1750s Lobby stair.

This view, taken before the stair was removed, shows how the 1922 AIA restoration architects uncovered the original floor boards of this landing.
Two upper layers of flooring are to be seen above the original landing floor. Under the bottom riser one can see the random width T&G boards left from the 1854 stair installation, and above this around and beyond the stair, one can see the uniform narrow T&G boards installed by T. Mellon Rogers in the 1898 restoration.

These upper floor layers protected the original flooring for some 68 of the over 200 years of its life. It is the only in situ original flooring in the building, and must always be protected from wear by the visitors who cross it twice with each visit to the second floor.

Illustration 40



Illustration 41

The Central Hall and Tower Stairhall in 1947, photographer K. F. Lutz, Philadelphia.

The chandelier and free standing torchères added greatly to the visibility in the Central Hall, although the chandeliers were over designed in their colonialism and the torchères reminiscent of Florentine Palace accoutrements.

By this time the black ground, gold lettered inscription panels in the tabernacle frames had been changed to a white ground with gold lettering and red outlines. The woodwork otherwise was all painted with white enamel.

The Liberty Bell remained with this hanging device until moved to its own pavilion in 1976.

Illustration 41

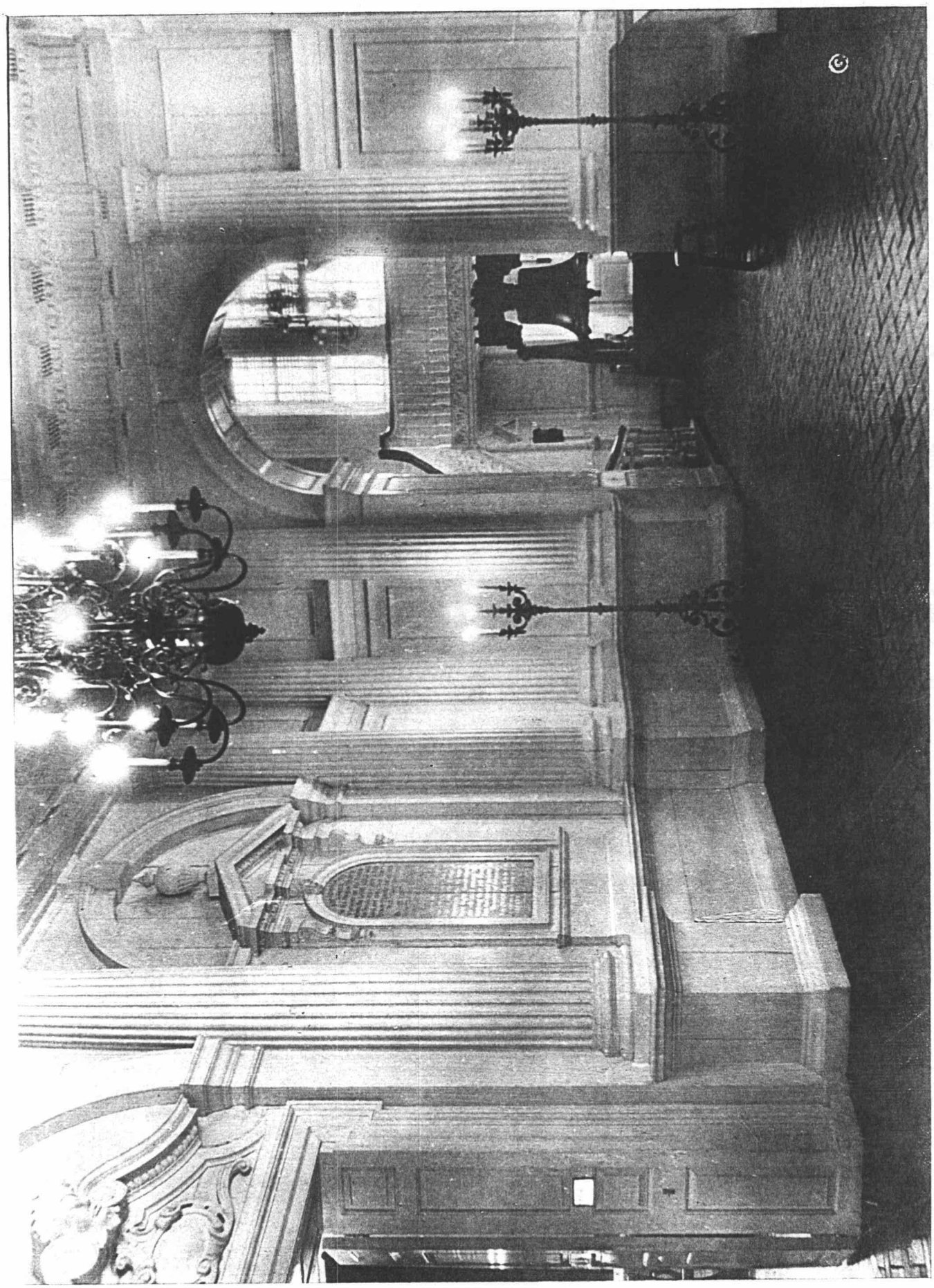


Illustration 42

Tower Stairhall, stair treads, first flight, July 10, 1952, photographer Knickerbocker, N.Y. (INHP negative 1865).

Although they look as though they should be, the stair treads shown are not original. We think they date from the 1898 restoration. The vertical rule indicates almost 11/16 inch wear in the center of the tread. The balusters and newel also show considerable damage. See the following illustration for the 1952 innovative solution to the tread wear problem.

Illustration 42

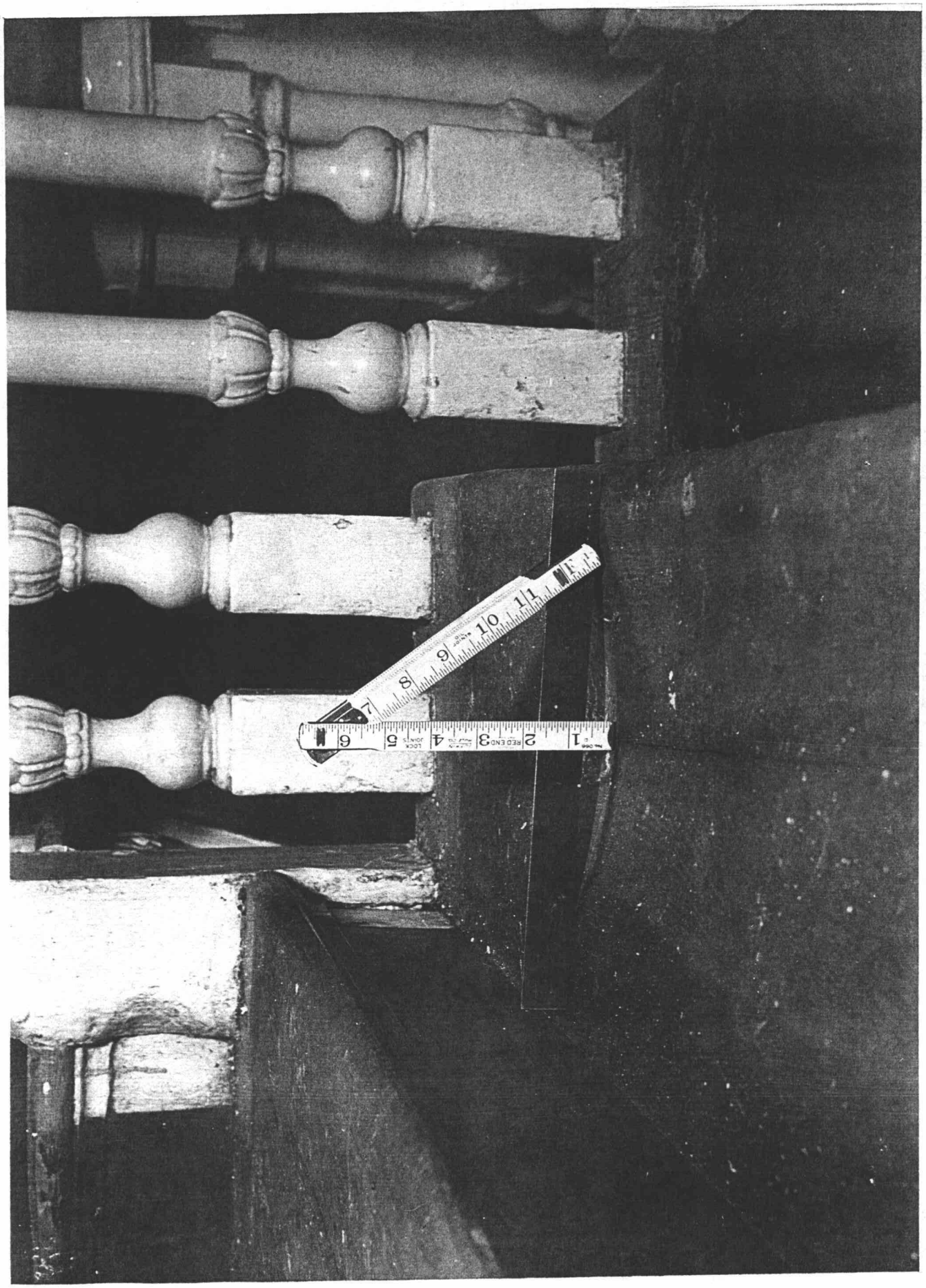


Illustration 43

Tower Stairhall, third flight of stairway, July 10, 1952, photographer Knickerbocker, N.Y. (INHP negative 1859).

An innovative solution to a problem of badly worn stair treads, these inserts were devised by the combined input of the INHP resident architects and a professional stair builder. Their chief advantage is that the stair need not be disassembled when the treads are to be replaced.

Edge grain yellow pine, two pieces glued up to make the width needed, the inserts here served well. The surrounding tread, however, lacking strength in its short sections, has cracked along its grain. The next time the treads need replacement the slip-in detail should be perpetuated, but the surrounding tread should be laminated for strength.

Any replacement must be anticipated a number of years in advance in order to procure the best quality possible of edge grain wood. Of course covering the treads with another sacrificial layer should always be considered as an alternative.

Illustration 43

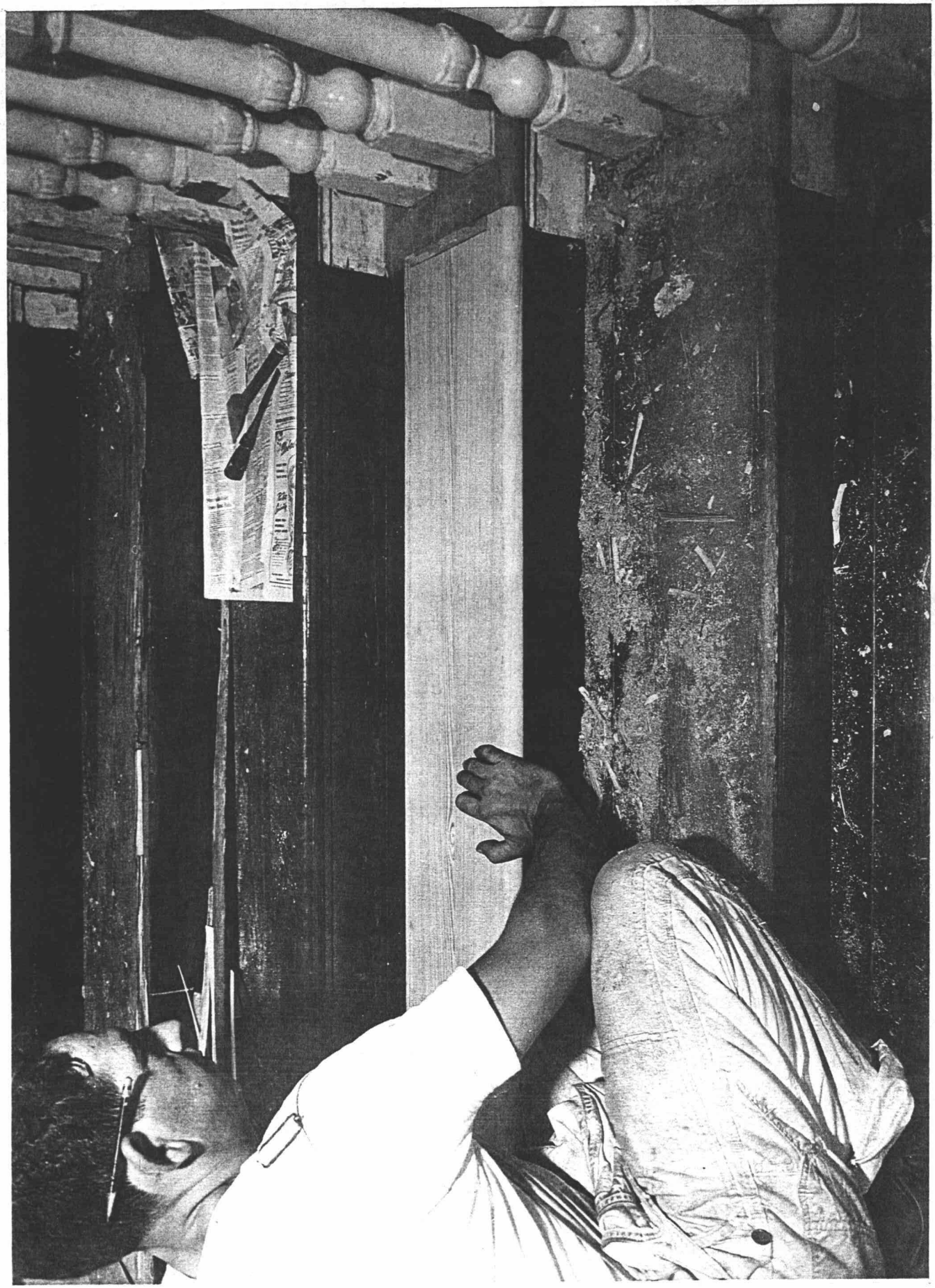


Illustration 44

Tower Stairhall, baluster capital, July 16, 1952, Photographer Knickerbocker, N.Y. (INHP negative 1854).

The lack of definition of the 1754-5 Samuel Harding carving, due to paint build-up, is what motivated the National Park Service to remove paint in the Central Hall and Tower Stairhall.

This appearance should be remembered when the temptation arises to apply a coat of paint to freshen up the woodwork; especially if one remembers it took one and one-half years for painters to remove the thick layers from this great woodwork, and in the desire to speed up the work, damage was done by heavy handed scraping.

Illustration 44

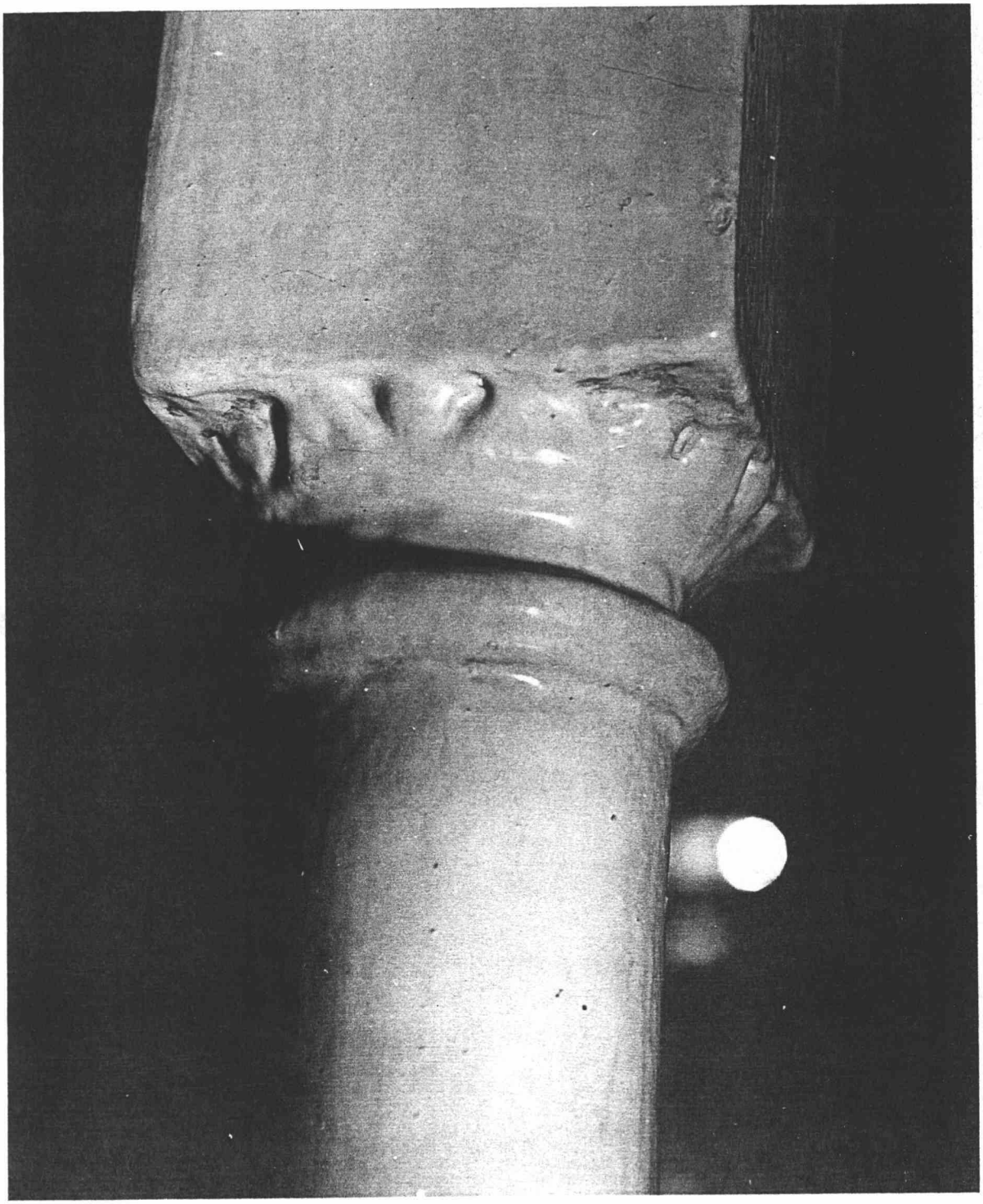


Illustration 45

Tower Stairhall, west wall, cornice soffit above the west window, November 28, 1956, photographer Penelope Hartshorne (INHP negative 4257-A).

To prevent damage in removing paint from Samuel Harding's carving the cornice soffit flowers were removed for soaking in paint remover. Here beneath one of them a chalk sketch was found, made probably by the master carpenter indicating to the carver that the flowers above the window should be oval instead of round. Or, perhaps it was made by the carver confirming his understanding of what was needed. This was the eighteenth century equivalent of what today would be called a shop drawing.

Illustration 46

Tower Stairhall, cornice soffit flowers taken down to soak off the accumulated paint, December, 1956, photographer Penelope Hartshorne, (INHP negative 3968).

Note the pencil marking indicating for which cornice the flowers were carved: "N", "S", "E", "W", and "C" for corner. This marking probably was done by the woodcarver, Samuel Harding.

The flowers were all fastened with only hand wrought finish nails, showing that they had never before been removed.

To reinstall them in their original positions, each flower was stamped on its underside with the wall and order number, for example "E-2", for east wall, second flower from left.

Illustration 45

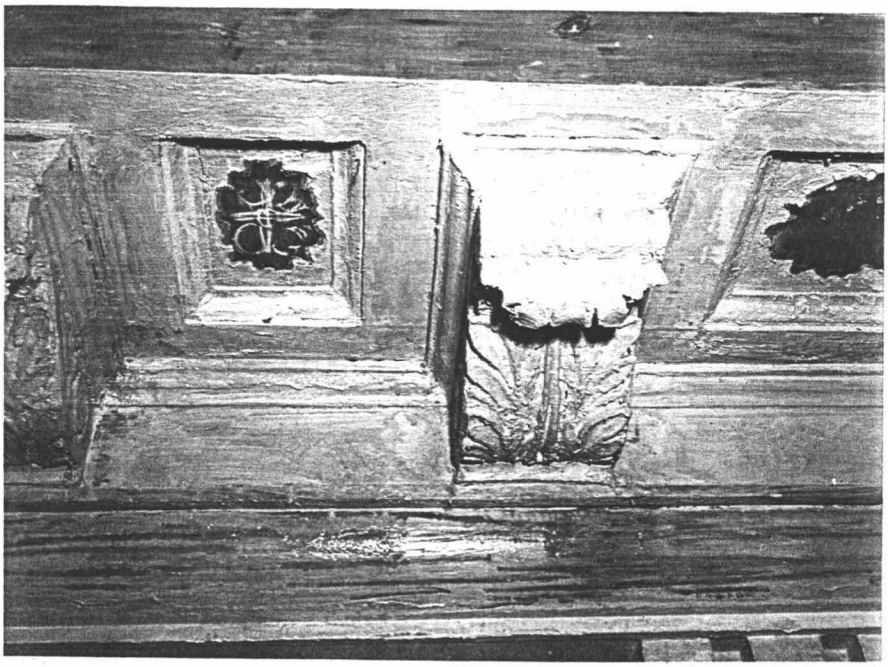


Illustration 46

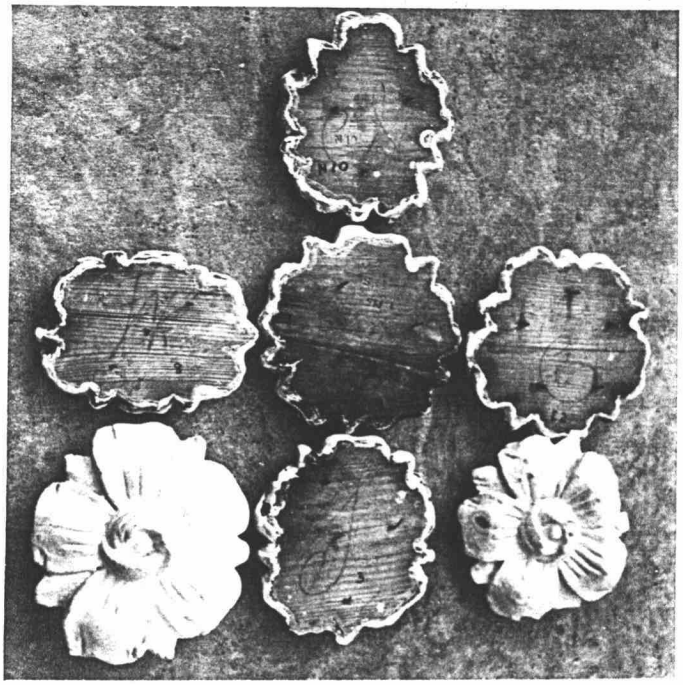


Illustration 47

Tower Stairhall, Palladian window during paint removal, May 8, 1957, photographer W. A. McCullough (INHP negative 4893).

Two towers of scaffolding with planks between gave access to the wall face. Tall step-ladders on the window sills accessed the deep window jambs. The public obviously was not permitted to see the second floor during this long paint removal process.

Illustration 47

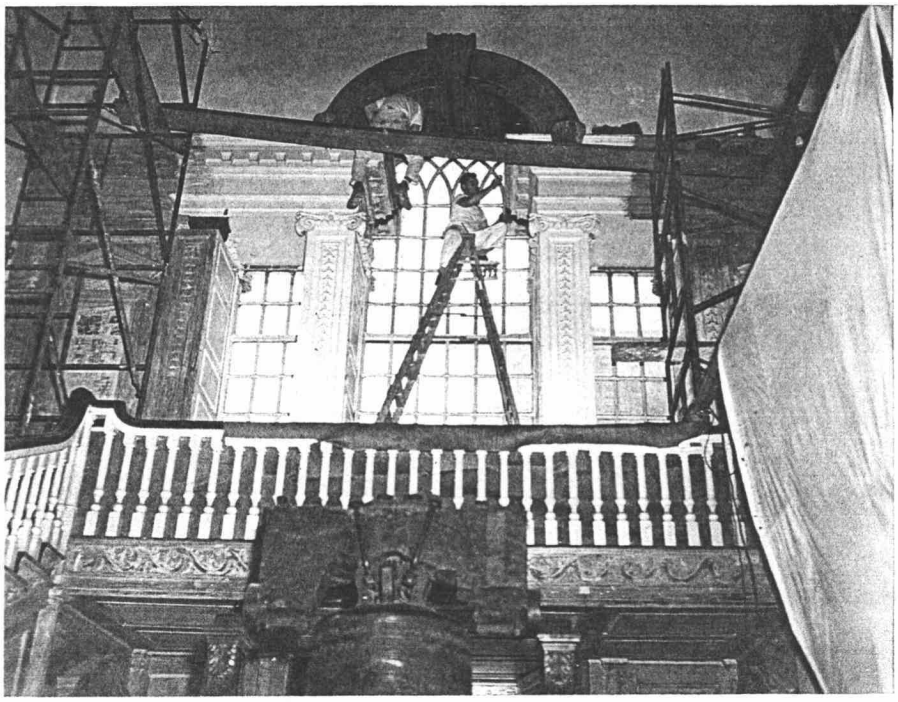


Illustration 48

Tower Stairhall, Palladian window, October 1957, photographer Penelope Hartshorne (INHP negative 5214).

The moisture from the fireproof, water soluble paint remover caused the original woodwork to move and when dry again many joints opened up. Much repair was necessary, requiring very careful and skillful workmanship, adding considerably to the time when portions of the building were closed to the public.

Illustration 48



Illustration 49

Tower Stairhall, south wall, eastern tabernacle frame, western bracket, January, 1958, photographer Penelope Hartshorne, (INHP negative 5107).

The arrows added to this photograph point to typical repair work, or renewal of missing pieces, carried out after paint removal. At A-A a previous repair covered a gap where the surbase had apparently dropped or pulled away from the wall boards. Particular attention should be given the clever insert in the floating raised panel at left.

Illustration 49

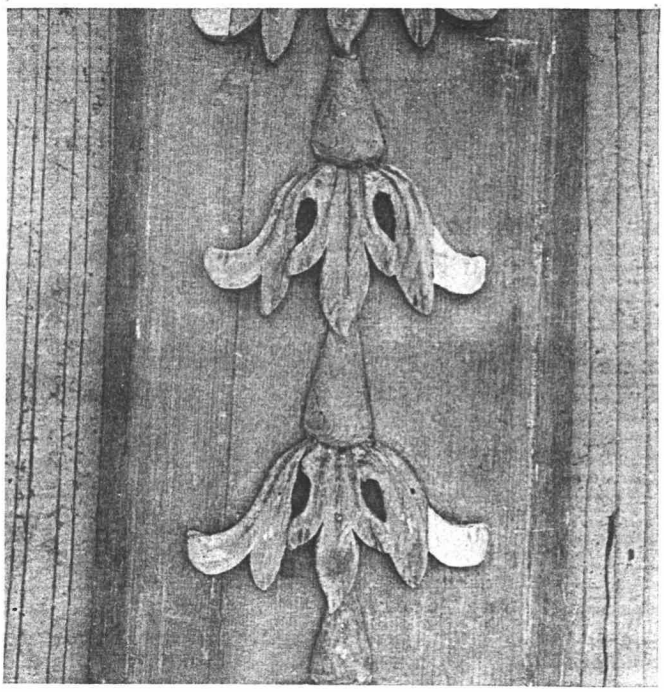


Illustration 50

Tower Stairhall, carved "draps of husks in the open plasters" of the south wall, July 1957, photographer Penelope Hartshorne (INHP negative 4646).

The skilled NPS carpenter who repaired the original woodwork was a wood carver as well. He replaced both missing pieces, illustrated here, and those carvings made of composition which had been added in the 1898 restoration.

Illustration 50



APPENDIX A

EIGHTEENTH CENTURY DELAWARE VALLEY ARCHITECTURAL DRAWINGS, THEIR TYPES AND SURVIVAL

A surprising number of eighteenth century Delaware Valley architectural drawings survive. The following is a start in listing known drawings as well as references to drawings having been made but which do not exist today. An attempt has also been made to divide the drawings according to their probable intended use.

We wish to show that those drawings which have survived tend to be those which were not used right on the construction sites. Of those plans listed, there are fifteen which can be categorized as proposed schemes, of which nine survive. There are two as-built drawings, of which only one survives. There are five survey drawings, all of which survive. There are only two references to sets of working drawings, of which none survive. Of two shop drawings one survives because it was done directly on the woodwork where its intended detail eventually covered and protected it.

Clearly the survival rate of proposed schemes, presentation drawings and survey drawings outweighs the survival rate of working drawings.

Building drawings were far less complex in the eighteenth century than they are today. Master builders and their workmen were well trained to work with the relatively few building materials used.

For the more commonplace buildings and repetitive rowhouses, oral or written specifications with dimensions often sufficed. One such specification is listed here. But even this specification relied on "the next house" to say that the new house was to be built "in the same manner."

Such simple specifications were augmented by the Rules of the Carpenters' and Masons' guilds. The 1786 Carpenters' Company of the City and County of Philadelphia rule book lists descriptions of building details. With their costs handwritten in the margins, a builder could discuss with the client the quality of construction available as well as the overall cost. And, after construction, this listing enabled the client to have another builder "measure" or judge if the product built met the amount being charged.

In the above rule book, plates were included to graphically describe some of the more important building parts. As they do today, customers need a picture; and, if the builder and client are both looking at the same picture then they are more sure of the outcome.

The high value of paper and the high cost of making drawings also limited the number of drawings. Copies were not made as is done today. The original working drawings went onto the job to deteriorate and be discarded upon completion of the work.

To quote National Park Service Architect Lee H. Nelson, "Buildings don't get built out of people's minds; they are too complex and three dimensional. They have always required drawings. It is only that our perception about drawings has changed, not their need."

The lists of known Delaware Valley drawings, separated by type of drawing, follow.

PROPOSED SCHEMES

(* Denotes drawings which survive.)

1732 * The Pennsylvania State House, elevation of the main building arcades and wings, first and second floor plans, shown not as built (Illustration 1). Dickinson Papers, Historical Society of Pennsylvania. This is the drawing probably referred to: " Mr. Speaker [Andrew Hamilton] produced a Draught of the State House containing the Plan and Elevation of that building; which being viewed and examined by the Several Members was approved by the House." Pennsylvania Archives, Sec. 8, III, 2154.

1732 * The Pennsylvania State House, first and second floor plans, shown not as built (Illustration 2). Penn Papers, Historical Society of Pennsylvania.

1746 For building the tower and steeple, the Christ Church (Phila.) wardens asked "to consult with Skillful Artichets and Workmen and endeavor to get a plan or Draft thereof ..." A plan drawn by a "Mr. Harrison" was adopted and a committee delegated to show it to the governor. Peterson, Charles E., "Building of Christ Church, Philadelphia," 1981 Antiques Show catalogue, p. 36.

c. 1749 * The Pennsylvania State House west gable tall case clock detail, Norris Papers, Historical Society of Pennsylvania, shown not as built (INHP negative 7886).

c. 1750 * "Calculation of Conrad Weidner of the Costs of a Building... as per Draught, Intended for John Smith ..."including two house plans and three elevations. Smith Papers, VIII, 39-42, Historical Society of Pennsylvania, LCP yi-7294.

c. 1750 * Samuel Rhodes [sic], study no. 21 for a facade", three bay center door, with three classic archways supporting a flat piazza roof. Historical Society of Pennsylvania; Garvan, Beatrice B., Federal Philadelphia 1785-1825, Philadelphia Museum of Art, Philadelphia, 1987.

1763-7 * Benjamin Chew plans and elevations for his house in Germantown. Margaret B. Tinckum "Cliveden: The Building of a Philadelphia Country Seat, The Pennsylvania Magazine of History and Biography, January 1964.

1773 David Evans, as general contractor for John Dickinson, submitted a "Draught of the Alteration of the Stairs in the old house for thy Examination." March 5, 1773 letter, Logan Papers, vol. 30, 49. Lee H. Nelson, Appendix A, HSR Old City Hall, INHP, 1970.

1775 "...a Committee was agreed to be appointed to have a Plan and make an estimate of the cost of a proper building..." Plan to build a city hall and county court house on State House Square. Feb.8, 1775, Minutes of Common Council,(1704-1776), 804. "The Committee appointed at the last meeting to consider a proper plan of a City Hall, presented one to the Board, but without an estimate of the cost." Ibid, 806, April 3, 1775.

1785 Samuel Vaughn proposed plan for Philosophical Hall approved June 17, 1785. Historic Philadelphia, vol. 43, Part I, APS Transactions, 1953, p. 46.

1786 * The Carpenters Company of the City and County of Philadelphia 1786 rule book. Thirty-five plates of structural and architectural details.

c. 1786 "Henry Hill, for drawing the Elevation of the House 3.10..." The drawing was for the County Court House (Congress Hall) at Sixth and Chestnut Streets. County Treasurer's Book 1794-1816. Municipal Archives, Philadelphia, INHP photostat 17047, Oct. 31, 1785-Nov. 1791.

c. 1788 * House Plan of Rhaeef Morgan, made for Benjamin Rush, to be built in Beula, Pennsylvania. Rosenbach Museum, Philadelphia (Courtesy of Constance M. Greiff).

1789 * Bingham House front elevation, drawn by Charles Bulfinch (1763-1844), Library of Congress, Washington, D.C.; Garvan, Beatrice B., Federal Philadelphia 1785-1825, The Athens of the Western World, exhibit, Philadelphia Museum of Art, 1987.

1789 David Evans submitted plans, elevations and estimates for a new Library Company building. Another design by William Thornton was chosen by the building committee. Minutes of the Proceedings of the Directors of the Library Company of Philadelphia, vol. 3, 137 & 157. Lee H. Nelson, Appendix A, Historic Structures Report, Old City Hall, INHP 1970.

SPECIFICATIONS - INCLUDING DESCRIPTIONS AND DIMENSIONS

(* Denotes drawings which survive.)

1763 Robert Smith's Building Contract for a house for Mary Maddox, Phila. Jan. 1, 1763. These Articles of Agreement do not mention accompanying drawings. The house was to be like the neighboring house in height, layout, and appearance. The articles specify dimensions and materials. Wallace Papers, 5,30., Historical Society of Pennsylvania.

WORKING DRAWINGS

(* Denotes drawings which survive.)

1750-57 Mention of drawings to guide construction: Description of work done in adding to the tower, steeple, stair and entrance hall to Independence Hall by Edmund Woolley. "To work done at the State House Vizt. drawing drafts..." Norris Papers, HSP, INHP photostat 1016. Note the plural "drafts."

1758 Mention of plans to guide construction: Articles of Agreement for Building a Church (St Peter's, Philadelphia, 1758)"...for doing and performing the same agreeable to the plan thereof hereunto annexed...That the said Robert Smith his Executors or Admnrs shall cause or procure the sd. Building to be Erected and finished in manner aforesd and as near agreeable to the hereto annexed plan as may be..."Christ Church records, Philadelphia.

SHOP DRAWINGS

(* Denotes drawings which survive)

1741 A "Proposal relating to the Carved Work," submitted by the Pennsylvania Assembly on August 15, 1741, was possibly a drawing for the leaf carved frieze board of the State House Assembly Room tabernacle frame and the carved Ionic capitals of that room. Pennsylvania Archives, Series VIII, vol. III, p.687.

1754 * Chalk drawing of oval soffit flower, west wall, main cornice, Tower Stairhall, State House of Pennsylvania, made possibly by wood carver Samuel Harding as a solution in laying out the modillion cornice. See negative 4257-B, Independence National Historical Park, (Illustration 45).

AS-BUILT DRAWINGS

(* Denotes drawings which survive)

1735 Receipt for drawings of the largely completed Pennsylvania State House: "The Honourable John Penn Esquire Dr. to drawing the Elevation of the Frount one End the Roof Balconey Chimneys and Torret of the State House With the fronts and Plans of the Two offisis and Piazzas Allso the Plans of the first and Second floors of the State House p. Edmund Woolley 5:0:0 pounds Recd. the 23d of July 1736 of James Steel the above mentioned Five Pounds --p me Edmund Woolley." Penn manuscripts, Historical Society of Pennsylvania. The drawings have not survived (Illustration 3).

1761-74 * The "Ground Plan of the State House" of Pennsylvania. This floor plan (Illustration 7) was drawn as a part of a city wide survey of block plans, and shows the buildings as-built. Pennsylvania Hospital's plan was also recorded on its block. These plans are thought to have been drawn after surveys made by John Lukens, principal City Surveyor 1761-1774 Draughts of City Blocks, c.1814, Item 90.6, vol. Fifth Division from Chestnut to Walnut, Philadelphia City Archives.

SURVEY DRAWINGS

(* Denotes drawings which survive)

1754 * Survey Plans of houses at Front & Pine Street, Philadelphia; wall thicknesses, open partition thicknesses, fireplace jambs, closets and stairs shown. Letter to Wm. Shippen, Lancaster Feb. 28, 1754 from Edward Shippen Senior, Shippen Papers, Historical Society of Pennsylvania.

pre-1750 * Survey of the State House of Pennsylvania, or "Province Hall" as it was titled. See Illustration 8, Chapter II, HSR Independence Hall, Historical Data, April 1962.

1783 * Two surveys of State House and State House Yard, with dimensions. See illustrations 22 and 23, Chapter II, HSR, Independence Hall, Historical Data, April 1962. INHP photostats 10015 and 10016.

c. 1799 * Single line plans made for the Plunkett Fleeson Estate [4th & Chestnut Streets]. Survey of several small houses clustered on lot with overall dimensions noted. City Archives, 3rd Survey District, Old Surveys Market - Chestnut, 4th-3rd Streets, Philadelphia.

1799 * Survey Slate Roof House and site plan, east side of Second St. corner of Norris Alley, Third Survey District Files, City of Philadelphia. INHP photostat 8,129. Plan shows overall dimensions and names buildings.

APPENDIX B

List of Artifacts from the Central Hall (CH) and Tower Stairhall (TSH) of Independence Hall.

Independence National Historical Park Architectural Collection

Accession	Catalogue	
2	1302	Plaster paint samples TSH.
69	5185-6	2 tabernacle frames 1870s, copies of original on E. Wall, CH
134		Samples of stain from entablature over door to Assembly Room, CH.
140		29 misc. items found loose behind paneling CH.
"	1300	Item 25 plaster paint samples TSH.
"	1305	Item 26, plaster paint samples TSH.
	"	Item 29, portion of TSH keystone over archway to CH.
142		Items 4-6 misc. items from CH.
144		Paint samples.
146		Molding pieces from CH.
155	1288	Paint specimen on wood TSH.
"	1289	" " " CH.
"	1290	" " " CH.
"	1291	" " " CH.
"	1292	" " " CH.
162	1272	Wood dentil with paint TSH.
166		9 Items from Independence Hall.
"	1293	Cornice flower chip with paint TSH.
"	1294	Plaster paint samples TSH.
"	1295	Wood chip from cornice with paint
"	1310	CH plaster ceiling sample.
167	1298	Cornice dentil paint samples TSH.

APPENDIX B contd.

Accession	Catalogue	
170		10 Items from CH & TSH relate to paint evidence.
170	1296	Plaster paint sample south wall TSH.
"	1297	Paint samples south wall cornice TSH.
"	1271	Wood flower cornice soffit TSH.
"	1273	Soffit panel & molding, cornice TSH.
171		3 Items from TSH.
"	1304	Paint evidence on cornice soffit panel.
"	1267	Carved modillion, cornice, TSH.
173		17 items from CH.
"	1280	Capital cap with paint evidence, east wall CH.
176		7 items from CH found loose behind NW paneling.
177	1313	2 paint chips from wall panels CH west wall.
178	1283	Plaster paint sample TSH, above Palladian window.
"	1301	10 plaster paint samples TSH.
180		77 items from Ind. Hall, many from TSH.
"	1281	Paint sample related to west wall clock weight case TSH.
"	1282	Panel related to modillion and west wall clock weight case TSH.
181	1279	Plaster with paint and burn marks TSH.

APPENDIX B contd.

Accession	Catalogue	
182		3 misc. items found behind paneling CH.
184		9 items from CH & TSH.
"	1314-18	Paint samples CH.
"	1276	Plaster sample with paint, west wall, TSH.
185	1286	Piece of wood of impost cornice with paint evidence, SW corner, CH.
186	1274	Piece of paneling with paint evidence (west wall), TSH.
"	1285	Piece of paneling, tongue, with paint evidence, TSH.
204		Soffit board in three pieces, TSH.
207		Paint evidence from dentil TSH.
209	1278	Plaster with paint evidence, west wall, TSH.
212	1306	Piece of paneling with paint evidence, west wall, TSH.
218	1307	Paint sample inside closet under east stair, TSH.
"	1308	Paint sample SE corner, east wall woodwork, TSH.
219		12 pieces of baseboard from TSH.
222	1320	Paint sample under dado crown SW corner CH.
"	1319	Paint sample south landing soffit, TSH.
258		Bones found within cornice, TSH.

APPENDIX B contd.

Accession	Catalogue	
296		Drawing 2358 Tabernacle Frames Lettering Patterns, CH and TSH, drawing missing (see photographs CN 36892A and B, CN-36893 A&B and photos in the H. W. Sellers Collection).
829		Misc. items found under floor, at archway between 2nd floor Lobby & TSH top landing.
980		Misc. items found in CH cornice.
1104		9 c. 1875 floor tiles TSH.
1308		Misc. items found under stairway, E side, TSH.
1707		TSH SE corner, baseboard level of paneling stile & rail with paint evidence.
1814	6226, 6260 8179-81	Pieces of baseboard from CH & TSH.
1819	6335	Piece of lightning rod, part of system installed in NW corner, TSH.
1902	6485 A-H	8 original ballusters, main stair, TSH.
2052	7016	Original pair HL hinges, guard room door, TSH.
2361	8175-6 8178 8183 abc	Pieces of baseboard, TSH. Pieces of baseboard, TSH. Pieces of baseboard, TSH.
2387-7		Section of column base, SE corner CH.
2387-24		3 pieces of pre-1750 baseboard (?), CH.
2387-30		3 pieces circular sawn lath from SE closet, TSH.
2387-31		Piece beaded wood pre-1750, NE corner, CH.

APPENDIX B contd.

Accession	Catalogue	
2387-40		Crude whittled riding crop (?), CH.
2387-47		Misc. items found behind pedestal, CH.
2387-52		Lath samples removed from ceiling, TSH.
2387-54		Head bolt from north entrance, CH.
2528		Baseboard with paint evidence from TSH.
2529		Baseboard with paint evidence from CH.
2555		Plaster castings of TSH carvings.
2806		Head bolt for 1875 south doors, TSH.
2807		19 pieces of woodwork, CH.
2819-36		Paint samples TSH.
2821-28		3 hooks for hanging portraits TSH c. 1874 [1898].
2821-59		Iron footbolt, north doors CH.
3260		Bottom rails of paneling TSH.
3416	12341-4	4 HL hinges c. 1875 South Door TSH.
3532		Collection paint evidence, microscope glass slides. Some from CH & TSH.
3633		From under NE stair landing TSH: what may be bricks from 1730-50 south entrance steps foundation (?)