THE EAGLE TYMPANUM OF THE PEDIMENT OF THE FIRST BANK OF THE UNITED STATES

Report upon the structure and materials and upon their condition, together with recommendations for treatment.

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Introduction

Howsoever closely the handsome eagle pediment is considered, it is still impressive as an architectural ornament of high merit. This is aside from the fact that it is unique; undoubtedly there remains nothing of its period quite like it since the destruction of Federal Hall in New York City. Viewed casually from the ground or scanned through field-glasses, it arouses an admiration which is more than confirmed by near scrutiny from scaffolding. Its deep carving, bold and sure, calculated to read well from a distance, loses nothing close at hand, whether architectural detail or figure definition. Miss Penelope Hartshorne's photographs show the lively and articulate character of the execution. See for example those of the head, of the wings, and of the foliated brackets. If Dr. Murray Nelligan's suggestion be carried out to publish a picture-book of the early wood carving within Independence National Historical Park, the eagle pediment will surely play a leading rôle. Recently a lucky few inspected it from a scaffold. There were: Mr. Joseph Silberholz, Park carpenter informed on wood and carving techniques, Miss Hartshorne, architect of E. C. D. C., Mr. Frederick Hanson, Park curator, and preservation specialists of the Washington Branch of Museums, Mr. Harry Wandrus and Anne Clapp. The last two are responsible for the suggestions for treatment which follow in this report. All decided to advise strongly that the preservation of the pediment be placed as high on the Park agenda as is practically possible. Serious damage has not yet occurred, although there are some most unfortunate losses. But conditions have developed which, if not soon arrested, will make necessary extensive repair and replacement.

The writer would like to acknowledge the help of not only the people mentioned above, but the willing and sympathetic aid of Messrs David Wallace, John Platt and David Kimball, Park staff, of Mr. Willman Spawn of the American Philosophical Society and of Mr. Henry Judd, architect of E. O. D. C.

The carving of the pediment is contemporary with the erection of the building, therefore done around 1797. The sculptor is not positively known, but almost certainly it was Clodius F. Legrand, a French craftsman whose name appears in directories of Philadelphia between 1795 and 1801. In the directories he is described as wood-carver, guilder and stone-cutter. Further, he definitely was involved in work on the Third Street façade of the First Bank. He placed an advertisement in the newspaper Aurora of December 14, 1797, in which he made the following statement ". . . . That having just finished the marble collonade, sculpture, carving, &c of the portico of the new building of the Bank of the United States, they [he and his three sons] are ready to contract for any works of their respective professions, from the plainest to the most extensive job of stone cutting; likewise all sorts of sculpture and carving executed in the marble, wood, plaster of Paris or terra cota; also monuments with figures, &c or plain architecture. . . . "

The accompanying sketch by Mr. Frederick Hanson shows the composition of the relief. In the center the fierce-eyed eagle with open beak and partly spread wings holds a firm stance on the upper portion of the globe. In his raised left claw he grasps the shield of thirteen stripes and thirteen stars, behind which is a cluster of arrows. An olive spray is placed across the globe. To the left of the eagle is

a cornucopia from which tumble all kinds of good things--wheat, corn, pears, apples, pomegranate, grapes and melon. To the right is an oak branch well furnished with leaves and acorns. The basis for the iconography of the eagle and his symbols is still obscure. The seal of the Bank at this time and the Federal seal resemble one another closely, except that in the former case the words "Seal of the Bank of the United States" run around the rim and in the latter a ribbon bearing the words "E Pluribus Unum" is held in the eagle's beak. In both cases the body of the eagle is covered by the shield, and the spread claws clasp the olive branch in the proper right and a cluster of arrows in the left. The pediment eagle has a different stance and the additional symbols of a globe, a cornucopia and an oak branch, which occur in neither seal. Oak branches and cornucopias are found in a number of bank emblems of the time with obvious significance, and the cornucopia appears in the seal of the City of Philadelphia. It is not unlikely that the subject-matter of the pediment was invented as a suitable device for this particular use and had no official basis. On the left side of the wood join at the upper chest, there is a rectangular hole which looks more like a deliberate cut than a lost piece. If deliberate, it could have served to support another symbol. However prints of the building done by Thomas Birch in 1799 and 1800 show no attachment at this point. They, of course, depict the original appearance. Yet, teasingly enough, in later prints, around 1830, an additional shield is shown covering the front of the eagle. Was Girard responsible for this possible change when he took over the bank in 1812? At present the Park historians are going through the Girard Papers and may turn up the answer to this slight problem.

Structure and Materials of the Tympanum and Carving

The tympanum of the pediment is made up of inch-thick, horizontal, pine boards of varying widths tongue-and-grooved together. There are two vertical joins to left and right of the center section which bears the high relief. Nailed to the reverse of the tympanum panel, eight slender, vertical cleats add strength and rigidity. The panel is longer and consistently higher than the opening formed by the pediment molding, and appears to be held in place simply by being pressed against the molding with wedges and furring boards which are themselves nailed to the beams supporting the pediment roof. The panel is held from forward movement by occasional nails driven from the outside into the lower ends of some of the furring boards. Its weight rests on the roof of the horizontal member of the pediment. Thus the tympanum wall is actually a panel, free to expand and contract. An added board along the outside bottom edge serves as a weather strip. The dimensions as framed by the pediment members are 34½ feet long by 6¼ feet high.

The carving is made of a number of pieces of solid mahogany, except for the bottom strip of the globe which is pine. This strip appears to be original, but may have been added after the tympanum was put in place, in order to make the protruding bottom edge of the globe conform to the slope of the horizontal pediment roof. See Figure 5. Mahogany was probably a deliberate choice of wood not only for its adaptability to carving but because its uniformly dense, relatively unringed structure allows it to withstand better than other woods moisture and termites. Most of the mahogany pieces are directly attached to the tympanum wall. But whenever the wood block was not

thick enough or high enough to accommodate the design, other pieces were added which are fastened only to the adjacent carving. It is interesting to note that the grain of this appliqued wood is at right angles to that of the supporting pieces. Attachment to the wall was by glue reinforced with large, three-inch, hand-wrought nails. Some of these nails were driven in on an angle from the reverse of the wall, some through the carving to the reverse where the points were clinched. Attachment of the plied wood was accomplished sometimes by glue alone, sometimes by glue and nails. It is very probable that the various pieces were first blocked out and glued together before the detailed carving took place. The reinforcing nails were then added. It would be needlessly lengthy to point out each individual member, and very likely there are more than have so far been discovered. The body of the eagle, for an example of joined pieces each attached to the tympanum wall, is made up of at least six members: the head to the throat is one block, the throat to the chest, the chest to a join level with the lower line of the wing, two pieces in the leg, and the larger part of the claw. See Figures 1 and 6. The shield, shown in Figures 6 and 7, is the best example of a built-out mass. Here there were at least seven pieces, including one of the raised stripes, appliquéd to the back shield-form, and held with glue and nails. Figure 6 shows the eagle's talons and the olive spray, whose outer plies were attached only by glue and have unfortunately fallen off. Some of the principal dimensions of the carving are as follows: the height from the head of the eagle to the bottom of the globe 6' 9", the maximum width approximately 21', the shield (for scale) 3' 4" high by 2' 8" wide. The bunch of grapes of the cornucopia has the maximum depth 1' 6" while the oak cluster is 1' deep as is the breast of the eagle.

Wood-worker's putty was used throughout the sculpture for several purposes: to define areas of low relief, to form gradual transitions between surfaces at sharp angles to each other, and as a caulking material to fill cracks and hollows. This putty, quite the same substance known to carpenters today as that defined in Thomas Dobson's Encyclopaedia published in Philadelphia in 1798, is a mixture of whiting and other inerts in a matrix of linseed oil. It clings to wood and other surfaces, retains its plasticity for a long time, shrinks little with aging, and is congenial to covering paint coats. It was generally used to make up inequalities in woodwork. In the eagle it defined the cloud-bands of the background. The deepest lines of the clouds were incised into the tympanum wall and from these lines the cloud masses were built up in putty. See Figures 1 and 9. It is found in angles, such as along the lines of the wings; in pockets where water could collect, as at the top of the shield. It filled the joins. In fact, its use may be found to be more extensive than can be at present ascertained. For example, it may form the shallower details of the feathers and even some of the feathers themselves.

There are more than twenty layers of paint on the pediment, and no evidence that any was ever removed. The paint layering on a dentil of the roof molding is identical to that on one of the leaves of the oak branch and on the barb of an arrow; and almost certainly paint has never been deliberately removed from the carving. All layers are varying shades of cream, white or light grey, frequently with covering coats of varnish. Therefore the eagle was never polychromed. The thick bottom layer is a warm, light, creamy color and was covered with a coat of varnish that has become very dark with time and soil. Thus the original intent must have been to make the pediment resemble marble, probably toned to conform to

the dominant color of the columns below. The accumulated paint, together with runs and drips in the latterly applied coats, fills much of the details of the carving.

Condition

The tympanum wall, unwarped and strong, seems to be fulfilling its supporting function as well today as it originally did. This is also true of the attachment of the major masses of the carving. Although the glue must have long since lost its adhesiveness, the nails are serving so well that there is nowhere any indication of these blocks pulling loose from the wall. The failure of the glue, however, has had a more serious effect on the attachment of the appliquéd wood. Those held by nails in addition to glue can be easily budged, such as the outer parts of the shield and the outer two arrows. Many of the parts dependent on glue alone have fallen off at various times in the past and been lost. Several were easily detached when, during the recent examination, they were tested for stability. The accompanying sketch indicates the locations of the detached pieces, single hatching denoting the lost ones, and cross-hatching the parts now removed for safe keeping. The dentil was deliberately taken for paint examination. Comparison between the present losses and those revealed in a photograph taken by Mr. Charles F. Peterson in 1947, shows that most of them had taken place before that date. The small loss on the melon and the largest loss on the olive spray are the only ones which have occurred since.

Because the carving is protected by the overhanging eaves from all but lashing rains, the mahogany is still in relatively good condition, nor is there any trace of insect tunneling. However there are signs of beginning deterioration. In unprotected pockets and other places where

dampness can be held, the wood has developed the soft, easily penetrated characteristic of beginning rot. The most serious places of this type of damage are in the right shield shelf, in the back shield-form at the bottom tip, in the bottom pine board of the globe, and in the weather strip to the right of the shield. See Figures 5, 7 and 8. Also, notably in the globe, the areas of wood which have been long exposed to the weather, because of their location and consequent loss of paint, have developed splits and checks. See Figure 5.

The condition of the putty and that of the paint are the principal reasons why the tympanum should be treated with the least possible delay. The putty has hardened and lost its adhesiveness, and has shrunk away from the wood. In places where it filled joins, the adjacent wood members have forced it out of position (see the chest-join in Figure 1, and the leg-joins in Figure 6), in places where it filled pockets and formed transitions between surfaces, it has become a crumbly substance (see the top of the shield in Figure 8 and the top of the wing in Figure 4), in places where it defined low relief it either already has sloughed away or is held in place only by the covering paint (see the cloud bands in Figure 9). The paint is in very bad condition. A good deal of it no longer exists. That remaining, especially in the lower weather-beaten half of the carving and tympanum wall, has become so cracked, broken and friable that showers of it can be loosened by brushing the hand over it. These two things, the paint and the putty, which formerly protected the wood from weather intrusions on its surfaces, at its joins and angles, have badly failed. If the situation is not corrected, dampness will seep into the open troughs and channels, as it already must have done, and begin to destroy the wood from within.

The bad condition of the paint is not confined to the carving and its supporting tympanum wall. It is also true of the paint of the entire pediment, see Figures 10 and 11.

Mr. Henry A. Judd who later inspected the pediment from the scaffold, said that the state of the flashing on the horizontal pediment roof might be considered one of the most dangerous factors of all. This flashing is made of 2' wide sheets of tin whose overlapping edges have become distorted and open. Rain, then, can flow through the gaps and effect the roof boards which are the support of the tympanum.

Recommendations for Treatment

The entire pediment requires repainting. The carving and its support are seriously endangered and in need of quick attention. Since this structure represents the only wooden element of the exterior of the First Bank, would it not be feasible and the results be not too incongruous to restore it as soon as possible, rather than to wait until the whole exterior is treated? Such a delay could easily be vital to a large part of the carving. Interim measures as shielding off the pediment are possible. But are they worthwhile?

To treat the tympanum and eagle, Mr. Harry Wandrus and Anne Clapp would proceed as follows:

1. To remove all existing paint from the entire pediment, with the exception of a triangle, perhaps of 2' base, in the lower right tympanum angle. The paint of this area, which is still relatively strong, could be kept for future paint research. The removal of the paint must be done by skillful people and with the most particular care. Further, it is recommended that the work be done largely with liquid paint remover and a minimum use of scraping devices. The battered state of much of the carving in Independence Hall demonstrates what pitiful and unnecessary

damage can be done by the ruthless use of scrapers in the hands of unsympathetic workers. In the tympanum there are to be considered not only the preservation of the carving from gouges and digs, but other factors as well. It has been mentioned above that the putty is no longer adhesive and holds its position largely by virtue of the covering paint, also that its use may be more extensive than is at present realized. The chances are good that the putty will come away with the removal of the last layers of paint. So that wherever this material is found to be an integral part of the carving, either casts or detailed sketches should be made of these places. There is no hope of preserving the pieces of loosened putty, or indeed any virtue in doing so, yet their function as part of the context should be established before removal to permit exact duplication. The cloud bands are already in a fragmentary condition. But it still is worthwhile to make casts or drawings of what remains. An additional reason for particular care is that there probably are many small appliquéd pieces of wood which will not be found until paint removal. These pieces could be unwittingly knocked off and lost during work, unless caution is taken.

2. To test all parts of the carving for stability, and to remove all pieces which can be budged. It is recommended that this be done after a fairly long dry spell, so that any looseness will not be concealed by swollen wood.

3. To reattach these pieces and those already removed for safe keeping with a modern, long-life adhesive designed for outdoor use, augmented with dowelling, if considered necessary.

4. To test wood for rotting in the weathered areas, and to treat it with an impregnating and preserving agent, or to replace it if it has decayed beyond cure.

5. To carve and replace all missing parts of the wood, perhaps in a different kind of wood to distinguish these pieces from the original carving. Also to fashion or cast the low relief putty-parts of the sculpture, with either modern, synthetic putty or weather-proofed plaster. In order to establish the appearance of the missing parts, even of the cloud bands, reference can be made to an excellent photograph in the Henry Paul Busch Collection of the Historical Society of Pennsylvania. It is a photograph called The Girard Bank, and bears the impressed words: "Copyright 1899/ Edward J. Jones Jr./ Watertown, Mass."

6. To dig out all remaining old filling material from the cracks and joins, and to refill them, as well as to fill all new cracks and splits, with a modern, long-life, weather-proof material.

7. To seriously consider treating the entire carving with a wood preservative.

8. To paint the whole pediment with several coats of paint whose outside coat is toned to match the original color. If a glossy (not necessarily a high-gloss) paint is used, there will be no need to cover the paint with a varnish, as was originally done.

9. To replace the flashing on the horizontal roof of the pediment, after making sure that the boards below are still in good condition.

Postscript

The plastics industry has developed (in fact, can now make to specification) such endurable and long-life materials, that the adhesives, fillers and surface sealers necessary for the restoration of the pediment should be finally chosen only after consultation with the industry and with wood-workers.

It is suggested that this work can be accomplished in the

same way in which the interior of Independence Hall is now being painted. Skilled carpenters and painters could be hired on a day-labor basis, and the work be done under the constant supervision of a staff member from Independence National Historical Park, E. O. D. C., or the Washington Branch of Museums.



FREDERICK B. HANSON DEL.

FIRST BANK OF THE UNITED STATES

THIRD STREET FACADE

CARVED WOODEN EAGLE IN PEDIMENT

Sketch showing major defects and losses in the carving



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



FIGURE 5

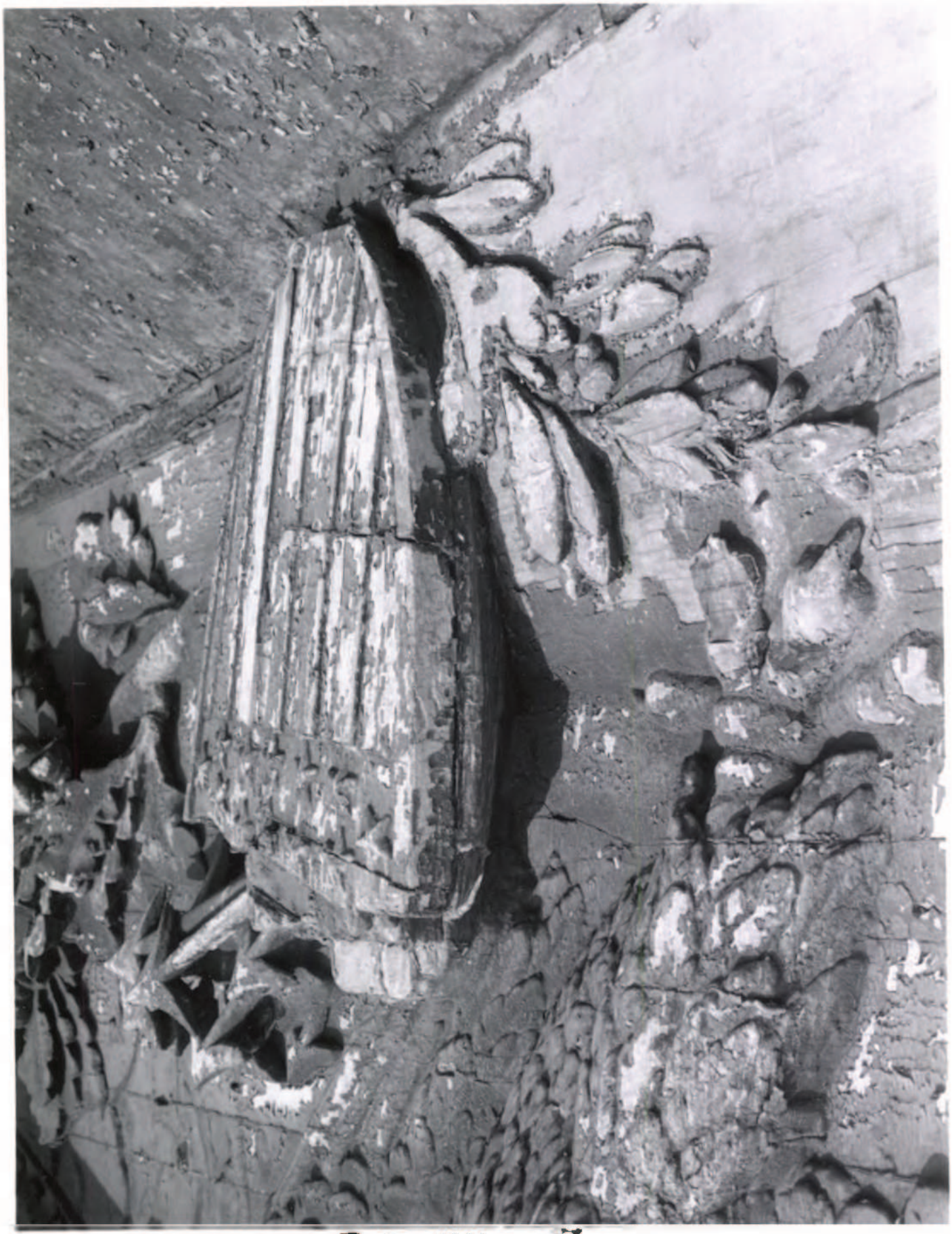


FIGURE 6



FIGURE 7



FIGURE 8

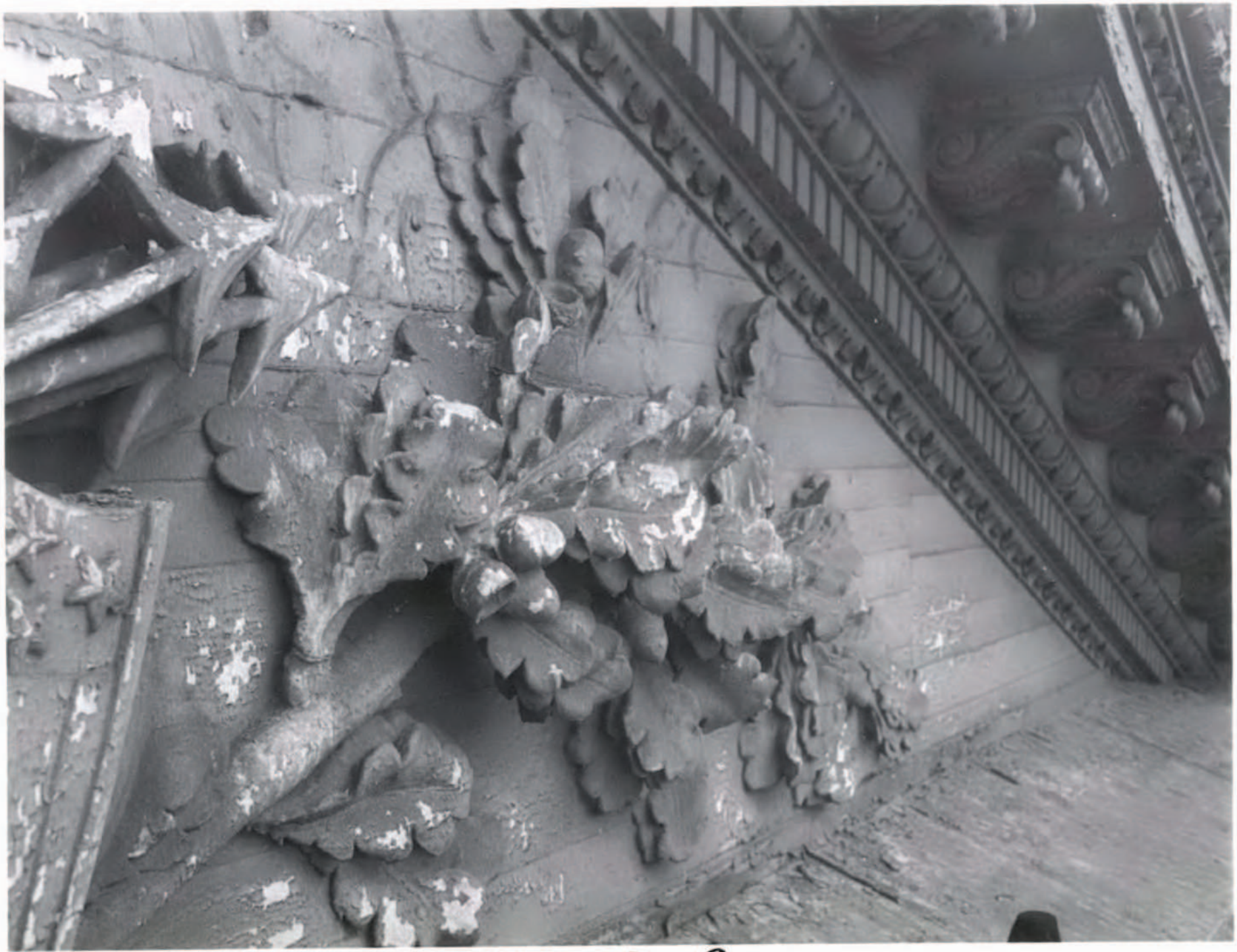


FIGURE 9



FIGURE 10



FIGURE 11