

Thomas Jefferson MONTICELLO

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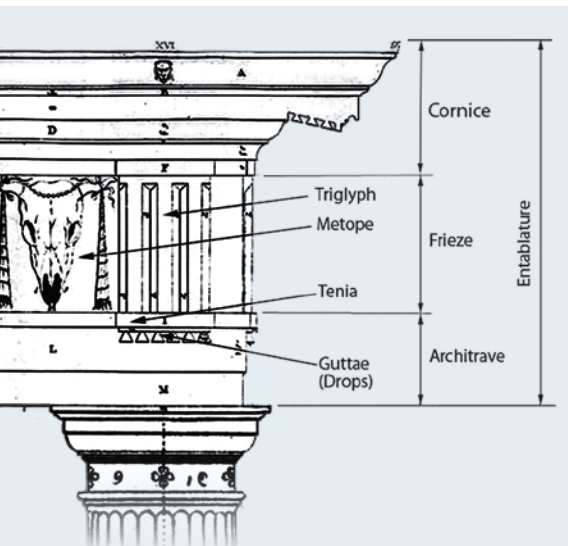
Triglyphs, metopes and guttae: A CASE STUDY IN RESTORATION AT MONTICELLO

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Architectural Conservator

A recent project completed by the restoration staff at Monticello provided an opportunity to learn about some unusual woodworking techniques used by Monticello joiners.

The project involved the repair and conservation of a section of entablature on the north side of the East Portico. Separation at some of the joints had promoted decay, and all attempts to treat the problem in place had proven unsuccessful. In addition, inadequate framing behind the entablature, probably dating to the early 1920s, needed reworking.



Monticello's restoration team removed the entire 11-foot run of entablature, originally constructed as one unit, from the column to the inside corner of the house. It was then transported to Monticello's restoration shop and partially disassembled to get to the problem areas.

The work involved the installation of a new architrave, the consolidation of other relatively minor areas of decay, the stabilization of splits in some of the metopes, repair of one of the triglyphs and an adjoining metope, and creation of a new metope to replace the crude early 20th-century one at the inside corner. All replacements were made using high-quality resawn heart pine to match the original. The removed elements were transferred to Monticello's architectural artifacts collection.

During disassembly, some surprising construction details were revealed. The first step was the removal of the guttae and tenia, comprising a series of dovetails, or flattened triangles (the guttae)



Senior Restoration Specialist Rob Newcomb, Henry Cersley and Bob Self lift the restored entablature back into place. T.J.F.

united by flat strips (the tenia). It was discovered that each grouping below the triglyphs was actually formed from a single piece of wood rather than from individual pieces as might have been expected.

After removing the pins and separating the mortise and tenon joints that secured the architrave to the triglyphs, the team found that the triglyphs were an assembly of individual beveled pieces simply nailed to a

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backing board. This efficient method of construction eliminated what would have been a very time-consuming job of carving each triglyph from a single block of wood, and it contrasts with the one-piece method used for the guttae/tenia sections, which were cut from the solid.

The restoration provided new information about woodworking techniques used at Monticello, while posing new questions. Were the same techniques used in any of the few examples of classical architecture constructed during this period? Or were the methods devised here, either by one of Jefferson's ingenious



North corner of the entablature before and after restoration. TJF

workmen or even Jefferson himself, who took an active role in the building process? Further research may provide some answers, but as the Marquis de Chastellux observed when he visited Monticello in the early 1780s, Thomas Jefferson was “the first American who has consulted the Fine Arts to know how he should shelter himself from the weather.”



Model of triglyph and guttae assembly TJF