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Carpenter Gothic Architecture: Its History, Care, and Repair

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The storybook quality of Carpenter Gothic cottages often radiates eye-catching charm which can simultane-

"The storybook Carpenter Gothic cottage is the most visually playful and lively of all American architectural styles" (Montgomery, 2011, p. 8). ously appear both gracefully humble and delightfully over the top. The architectural style, also referred to as Rural Gothic or Gothic Cottage, was popular in the United States during the mid to late 1800s and was taken and adapted by all class levels. In fact, the Dibble House in Eldon, Iowa, which served as the inspiration for the classic *American Gothic* painting by Grant Wood and is still remembered as an iconic example of the style, happens to be a fairly simple Carpenter Gothic farmhouse.

The adaptive quality of the Carpenter Gothic style allowed for interesting experimentation and creative combinations of detailing by architects of both high style and vernacular architecture, while providing distinct parameters within the architectural framework. Examples of Carpenter Gothic architecture can be seen in both residential villas and farmhouses, in stately urban commercial properties, and in humble rural churches.

The intricate and creative wooden details that make up the iconic scroll work, trefoils, spandrels, and other features are essential to preserving the defining characteristics of the style. Because the main construction material is wood, it is doubly important to practice proper routine maintenance and repair applications.

History of the Carpenter Gothic Style

The Carpenter Gothic style of architecture is an offshoot of the classic Gothic Revival style, which was popularized in Great Britain and the United States throughout the eighteenth and nineteenth centuries. The Gothic Revival movement revisited the classic Gothic style of medieval Europe and influenced everything from architecture to furniture to literature. This return to the Gothic style was in line with an economic uptick that had spread throughout the Western hemisphere. Carpenter Gothic style's lofty design and intricate ornamentation reflected the optimistic attitudes of the time.

The movement gained significant traction in the United States by the mid-1800s and was especially popular when designing churches, schools, and other commercial buildings. The residential application of the style was, at first, only used by the wealthy elite; however, the architects Alexander Jackson Davis and Andrew Jackson Downing successfully worked to adapt the Gothic Revival style for more widespread accessibility. It was through this partnership that the distinct Carpenter Gothic architecture style was created.

Davis and Downing switched the traditional construction material of the Gothic Revival style from stone or brick to the more plentifully available wood, which was the preferred material of Americans during the nineteenth century. This major design change shifted the general "feel" of the style to a more romantic and storybook look and



Figure 2: The inspiration for Grant Wood's famous American Gothic, the Dibble House in Iowa shows fairly simple, but still distinct, Carpenter Gothic design elements. Take note of the iconic front window. Eldon, IA.

quality. The simultaneous rise of the recently perfected steam-powered scroll saw allowed for more intricate and detailed scroll work and "gingerbreading" on these houses. The development of steam-powered mechanics in the nineteenth century further emphasized the industrial outlook of the time and the mass production of the scroll saw greatly increased the popularization of this unique style. It is somewhat ironic, then, that the creators of the Carpenter Gothic often stressed urban areas as unsuitable for the style.

Davis and Downing promoted the application of the style in rural settings, as it was essential that the design complement the surrounding landscape. Both architects were primarily interested in rural architecture and picturesque styles, which is apparent by their previous and subsequent work. Davis was the first of the two to promote the domestic Gothic style in America and published an 1837 book, *Rural Residences*, that featured several examples. Downing expanded on Davis' work in promoting the Gothic style with his own 1842 book, *Cottage Residences*, and the largely successful 1850 collaborative piece, *The Architecture of Country Houses*.

The Carpenter Gothic architectural style was primarily focused in the New England area of the United States, as the preferred region of Davis and Downing, but examples of the style have been identified across the nation. Although the style never became particularly predominant, it was certainly popular during the tail-end of the Gothic Revival movement, and its influence could undoubtedly be seen in subsequent Victorian designs.



Figure 3: Compare the Dibble House with this Carpenter Gothic House in Pittsburgh. The distinct architectural features reflect a high style design that, compared to other modest examples, emphasizes the flexibility and creativity of Carpenter Gothic cottages. Pittsburgh, PA.

Characteristic Features

Traditional Gothic Revival architecture is known for steeply pitched roofs, decorated gables, and arched windows, and these features transfer over smoothly to Carpenter Gothic houses. The picturesque architectural details largely characterize the style and are usually what first catches the eye. While there are several detail options and combinations available, Davis and Downing both cautioned that the best examples of Carpenter Gothic cottages show restraint and modesty in their decoration.

A rectangular floor plan with a steeply pitched gable roof make up the basic shape of a Carpenter Gothic structure, largely due to its efficiency and cost. Some wealthier owners could add porches, additional side wings, balconies or even simple towers and spires. The grounds and front entrance of the cottage were carefully cultivated to emphasize a graceful charm, with the ultimate goal of presenting a picturesque and romantic view.

Clapboard siding was often used as an exterior sheathing for Carpenter Gothic cottages, but horizontal boarding, board-and-batten siding, and scalloped shingles were also popular. The preferred sheathing, according to Davis and Downing, was board-and-batten due to the material's durability and clean look. They also supported the use of shingling, which had originated with the Carpenter Gothic style and was later used for Victorian and Colonial Revival structures.



Figure 4: The intricate scroll work and other wooden details seen on the house above are characteristic of the Carpenter Gothic style. Harrodsburg, IN.

Intricately carved exterior trim, like spandrels, vergeboards, finials, and lattices, helped Carpenter Gothic houses achieve their hallmark storybook look. The use of wood allowed for endless variety and creativity through hand-carving or scroll saw work. Downing emphasized that ornamentation on the entrance door, principal windows, gables, and chimneys were required to best pull off the Carpenter Gothic design. Occasionally, cast iron would be used for this trim work, instead of wood, as it was considered more durable in humid climates and easier to mold in the absence of accomplished wood workers. This trim and ornamentation often incorporated Gothic design motifs like the trefoil, quatrefoil, and cinquefoil.

The Carpenter Gothic style is meant to convey hospitality and warmth, and so the sun is often incorporated into the overall design. Overhanging gables and roofline trim was often designed so that natural sunlight would cast striking shadows. Historically, most Gothic Cottages featured warm, muted colors, like grays, tans, or even muted pinks, though one could also see more brightly painted examples. Large, intricate windows are frequently seen on this style, some with stained glass or other unique features.

Arched windows are often featured prominently on Rural Gothic cottages, occasionally alongside arched doors and similar openings. These arched windows, called lancets, may appear in combination with other window shapes, such as more pointed arches or typical squared windows. Some houses may feature a wooden cutout above rectangular windows to mimic the effect of lancets, called false shaping. Bay windows and drip mold window crowns are also common features.



Figure 5: The Carpenter Gothic style had far-reaching spread, as seen by this example in New Zealand. Observe the carefully planned landscaping that emphasizes the warmth and charm of the cottage's design. Parnell, New Zealand.

While the application of these architectural details offered a great deal of combination possibilities, Davis and Downing emphasized simplicity when putting these intricate designs onto a simple base. According to the two, the best examples of Carpenter Gothic Cottages would show restraint in the combination of these often elaborate details.

Preservation of Characteristic Features

Since the key features of the Carpenter Gothic architectural details are typically composed of wood, an organic material, they can sometimes prove difficult to maintain, especially in more humid areas like the American South. The main cause of deterioration in wooden features is exposure to moisture which can lead to wood rot, so proper routine maintenance is key to preservation.

Routine painting and cleaning of wooden features is generally recommended as means of simple wood preservation. A layer of paint on a wooden surface acts as a moisture barrier and the diligent preservation of this barrier can significantly extend the life of these outdoor features. Carpenter Gothic cottages were usually kept painted, so the use of paint does not threaten the historic authenticity of the architectural style. A simple yearly spot check of the paint's integrity should suffice in keeping up this maintenance. When conducting paint checks, pay close attention to joints or other areas of frequent use or damage, like windows and doors.

Routine cleaning, without the use of water, is also an easy way to maintain these key architectural features. Keep wooden trim free from dirt and debris through fre-



Figure 6: Take note of the use of cast iron in combination with wood to create the classic Carpenter Gothic details on this Ohio cottage. Bellefontaine, OH.

quent cleaning with soft brushes, or, if needed, a slightly damp cloth. Plant life, like climbing vines, can further promote moisture and pest activity. Be sure to clear away plant life that may be potentially damaging to the wooden elements of a Carpenter Gothic cottage.

Historic windows can be easily maintained through frequent checks of the paint, glazing, and functionality. Keep an eye on the condition of paint, as that can be a first indication that moisture has penetrated or has an opportunity to penetrate the wood. Be sure to keep windows properly glazed to prevent moisture damage and assist in weatherproofing. Carpenter Gothic cottages often featured a combination of windows that were set in or functional, so be sure to periodically test that all are working properly.

Repair Tips for Damaged Features

Proper routine maintenance can often prevent major damage from affecting the wooden detail work adorning Carpenter Gothic cottages. However, if damage has already occurred, one may need to make decisions regarding the repair or replacement of key features. The first step in determining if repair or replacement is needed would be to conduct a general assessment of all wooden components that are in question.

In many cases, general layman repair is sufficient in fixing and preventing further damage. Some examples of repairable damage would include chipping or weathered paint, cracked sections of wood, or unsecure wooden details. However, some damage may be too expansive, dangerous, or complex to attempt general repair. Damage that may require complete replacement can include missing sections of features, deteriorated



Figure 7: The windows, clapboard, and trim on this rural church are distinguishing features of Carpenter Gothic architecture. Nebraska Congregational Church. Blair, NE.

or rotten wooden sections, or operational issues. It may be helpful, when assessing the condition of a structure, to keep a record of where any damage is identified to determine the full scope of repairs needed.

As stated previously, some issues can easily be addressed by laymen, but others may require expert assistance. Flaking or weathered paint can potentially be hand sanded and reapplied, but take caution if the damaged paint is older, as it may contain lead. When sanding off paint, it would also be prudent to fully assess the wood beneath for additional issues.

For small cracks or joint separations in wooden details, it may be possible to repair them with an epoxy or wood filler to prevent further damage. Wood fillers can be found at most hardware stores and can be painted over to blend with the surrounding material. Some unsecure wooden details, like railings or trim, may prove simple to reattach or secure with epoxy, as well. They could also potentially be secured with household tools, like hammers, nails, and screws. However, be sure to fully test the soundness of the repair, especially on features that could prove dangerous if they later fail, like porch railings.

Excessive deterioration or damaged features will certainly require more specialized repair or complete replacement. It would be practical to hire an expert to assess the features in question. Houses that have been left to weather without routine care are at risk of structural damage along the roofline and porch, where several Carpenter Gothic features are concentrated. Depending on the extent and nature of the damage, experts may be able to simply repair or replace sections of key architec-



Figure 8: Though possibly not as severe as the window of this vacant house, lack of routine care can allow for moisture to penetrate wooden architectural details and cause extensive damage.

tural details, without needing to replace the entire feature. Keep in mind that windows and doors may have more significant operational issues due to frequent use and may require more specialized repair or replacement. If it is a question of repair or replace, it is usually a good idea to save as much of the original as possible, especially when it comes to the unique features of Carpenter Gothic cottages.

Additional Resources

Because the Carpenter Gothic style is so dependent on the detailed architectural features that adorn the cottages, it is vital to take preservation measures. These wooden details may seem difficult to preserve based on their material and design intricacy, but routine maintenance, like painting and cleaning, can easily maintain these features for years to come. More information on historic maintenance and repair can be found in the National Park Service Preservation Brief series. The series has several resources specifically targeting historic wooden features which are particularly helpful.

Conclusion

The Carpenter Gothic cottage is an excellent example of the adaptation of architectural style across time, class, and place. This rural Gothic style, which stemmed from the popular Gothic Revival movement of the nineteenth century, utilized a construction material preferred by Americans and a small construction style more easily accessible to the middle and lower class. The combination of the intricate and lofty design details decorating a simple base form created a unique charm that is still impactful decades into the future.



Figure 9: Cracking and flaking paint, like the paint seen on this porch, can expose wooden detailing to moisture and dirt, promoting further damage. Be sure to monitor the condition of the paint on Carpenter Gothic features and clean regularly.

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Figure 10: A House in the Carpenter Gothic Style. Stony Point, NY.

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Figure 11: A House in the Carpenter Gothic Style. Greensboro, NC.

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