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Article Summary: Features characteristic of the Gothic Revival Style appear in some traditional I-houses built in Nebraska between 1860 and 1900. Local builders introduced new methods and materials, however, creating a regional version of the I-house.

Cataloging Information:

Names: Jasper A Ware, Andrew Jackson Downing, Jesse C Bickle, August Auman

Nebraska Place Name: Bennett, Nebraska City, Crete, Pawnee County, Otoe County, Clay County, Polk County

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Photographs / Images: Fig 1. elevation (2 views) and floor plan of a typical I-house; photo, elevation, and floor plan of the Bennett I-house (Brownville, Nemaha County, Nebraska, 1865); Fig 2. photo of the Gothic Revival style Jasper A Ware house (Nebraska City, Nebraska, c. 1865); Fig 3. sketch of a Gothic Revival style house surrounded by gardens (Andrew Jackson Downing, A Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America (1865); Fig 4. photo of the Jesse C Bickle house, a traditional I-house with Gothic Revival features (Crete, Nebraska, 1868-1870); Fig 5. photo of a Gothic Revival style cottage (Nebraska City, Nebraska, c. 1875); Fig 6. diagram of milled-lumber-and-nail balloon frame construction; Fig 7. photo, elevation, and floor plan of a farmhouse built by someone who did not understand milled-lumber-and-nail construction (Pawnee County, c. 1870); Fig 8a. photo and elevation of a one-and-a-half story farmhouse whose builder unsuccessfully used a combination of building techniques (Otoe County, c. 1880); Fig 8b. elevation and plan for the farmhouse in Fig 8a; Fig 9a. photo of a one-and-a-half story farmhouse built using the I-house plan and a balloon frame (Clay County, c. 1900); Fig 9b. elevation and plan of the farmhouse in Fig 9a; Fig 10. diagram showing variations in balloon frame sill construction; Fig 11a. photo of a one-and-a-half story farmhouse built by August Auman (Polk County, between 1880 and 1910) with an I-house plan and German-American ethnic features; Fig 11b. floor plans of Auman house, first phase (c. 1880) and second phase (c. 1910)
Tradition

Which is a more lasting and powerful influence upon an individual or a group—attachment to kinfolk and obligations to maintain "the old ways," being a part of the latest style and passing fashion, or hankering to try new methods and materials that lead to innovative and improved results? A study of an Anglo-American type of house built in southeastern and central Nebraska from the 1860s to 1900 provides a basis to respond to this question by explaining how farmers and entrepreneurs made adaptations in the appearance of the traditional house type according to preferences for architectural style or, during the same period, made changes in its structure for the sake of realizing new economies and efficiencies in methods of construction. An answer to the question is possible because analyses and interpretations of architectural works are significant ways to ascertain the beliefs, values, and patterns of behavior of individuals and groups of a particular time and place. In this case it can be demonstrated that, as builders perpetuated the traditional house type in plan and elevation, practical values related to economies of craftsmanship and structure proved more significant than aesthetic values that directed choices for architectural revival styles.

Beginning in the 1820s, Anglo-American migrants from New England, New York, and Pennsylvania were the first to settle the Midwestern frontier in areas that were to become Indiana, Illinois, and Iowa. These migrants brought with them the preference and skills to recreate a traditional house type that in elevation and floor plan originated in sixteenth-century Elizabethan England. Beginning in the early eighteenth century, successful colonial farmers and merchants built this kind of house in the American colonies. Geographers and architectural historians identify the house type as the I-house (Fig. 1). The name has a two-fold explanation—the long, narrow elevation of the structure's front unit resembles the letter I, and the geographer who initially labeled the type found such houses in states beginning with the letter I: Indiana, Illinois, and Iowa.¹

The broad, two-story symmetrical unit with a one- or two-story extension or ell at the back provided builders the architectural means to reflect the success and substance achieved by the occupants of the home in the New World. The interior divisions of space repeat the formal balance of the principal facade as parlor and sitting room or dining room adjoin a central staircase and hall with two equal size bedrooms on the second floor. Chimneys at both gable ends, or on walls defining the central hall of the major unit, mark locations of flues on both stories. The one- to two-story ell at the back of the main unit provided a kitchen and dining room with a bedroom or storage space above. A chimney at the end of the ell served the hearth or a cast-iron range. The stately appearance, substantial scale, simple symmetrical beauty, and balanced proportions of its elevation, as well as the convenience of its floor plan, reflected the sound practical

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Fig. 1. Named for its resemblance to the capital letter I and for its frequent occurrence in Indiana, Illinois, and Iowa, the appearance, scale, symmetry, and proportions of the I-house (above and top) are said to reflect the practical qualities and moral virtues of the people who adopted the style. Courtesy the author.

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qualities and the sturdy moral virtues of those who occupied the house as their home.²

By the 1850s Anglo-American migrants began moving westward into Nebraska Territory from areas noted above, as well as from the south-central states of Kentucky and Missouri. Even before Nebraska became a state in 1867, these settlers had established farms and businesses in the eastern section of the territory. The Bennett farmhouse is an impressive example of a rural dwelling built by a Southerner after he established the farm as a successful agricultural enterprise (Fig. 1). Built in the mid-1860s just west of Brownville, the farmhouse is a direct transplant of the I-house type from eastern states to Nebraska. The central Federal-style porch and entry with sidelights adds an element of style to the monumental vernacular simplicity of the principal facade. Entrance through this major portal introduces one to the formal hall, parlor, and guest room. The one-and-a-half-story wing includes a dining room and a kitchen that is strategically located behind the dining room for service, and sufficiently distant from the parlor and sitting room to avoid cooking odors in the formal social section of the dwelling. The major facade of the house faces north. The impressive scale and monumental quality of the structure, located on a prominent rise of land approximately two miles from the Missouri River, identifies it as the home of an important family in the area. The builders of this house not only perpetuated its traditional form, but also preserved the values of order and utility associated with the I-house type and its Anglo-American occupants.
Style

Another I-house of somewhat different appearance is located upriver from the Bennett farmhouse. Jasper A. Ware selected the site for his home on a gently sloping hill to the west of Nebraska City (Fig. 2). While the Bennett farmhouse announced agricultural success in a vernacular idiom, the Ware house broad-cast position and prestige in a current, fashionable high style of the Gothic Revival. The qualities and site of the house became closely identified with its owner as a wealthy banker and prominent citizen of Nebraska City. An Otoe County biography describes Ware as living "in one of the pleasantest homes in Nebraska City, a commodious brick structure, which is finely located on an eminence, sloping back from the street, one mile from the court-house, overlooking a beautiful stretch of country."  

While the floor plan of the Ware house is virtually identical to that of the Bennett house, its walls are brick and its elevation is one-and-a-half stories. A major difference between the two homes, noted by contemporaries, is the sophisticated quality of style evident in the Ware house. A steep central gable with an ornamental vergeboard over the front porch frames a window formed as a pointed arch—a Gothic window. The eaves at the side gables also have vergeboards of the same design as the central gable. The features of gable, vergeboards, and Gothic window were all that was necessary to lift this structure out of the ordinary and the traditional to be perceived as the home of an educated, cultured gentleman. Simplicity was appropriate for the yeoman; style suited the successful entrepreneur.

The Gothic Revival style in American architecture originated in the 1830s and continued as a fashionable choice for the finish of a home into the 1870s. Andrew Jackson Downing, an architectural stylebook author of refined Hudson River society, became a major spokes-man for the style during the 1840s. He recommended house designs with Gothic exterior features like the Ware
house. Further, he noted the importance of interior finish and furnishings as well as a picturesque hillside site on which to locate the house in a garden environment (Fig. 3).\(^5\) Downing and other architectural stylebook authors of the mid-nineteenth century equated the attainment of this kind of aesthetic taste with the possession and practice of moral virtues. These reformers asserted that the educated, refined, genteel class could be identified as those living in an appropriate, picturesque Gothic style home surrounded by a landscaped garden. These stylish homes, they claimed, were places for sound moral family life and, therefore, civilized examples of domesticity that would inspire others to build proper homes for the edification of the new nation.\(^5\)

Stylebook authors supplied builders with a variety of elevations and plans for houses in the Gothic Revival style, accompanied with the standard rhetoric about family values and civic virtue attained in the proper domestic environment. Most advised an asymmetrical elevation and floor plan as the best way to obtain the picturesque qualities of beauty that were so much the fashion of the time. Architectural stylebooks did, however, offer designs using the formal balance of the traditional I-house. One can recognize the essential qualities of the house type because the Gothic features of pointed arch window, steep gable, ornamented vergeboard, and porch are, as in the Ware house, added to the surface of the structure. Style and its attendant virtues seemed fairly easy and economical for the American homeowner to acquire because they were elements applied to particular portions of a house to create the desired appearance and prompt the recognition of the proper American lifestyle.

The Jesse C. Bickle house in Crete, Nebraska, is an excellent example of minimal use of ornamental features on a traditional I-house that qualify the home as one of the Gothic Revival style (Fig. 4). Only the front central gable, end gables, and two wall dormers on the southern facade have scrollwork vergeboards that add the Gothic touch to the tall, slender proportions of the vernacular structure. Bickle built the house on the edge of town in ample space where large shade trees grew along the Big Blue River. Despite its vernacular simplicity, contemporaries recognized its style and picturesque environment as significant:

Arriving in Crete on an excessively hot day, and missing Michigan shade trees, our Walks around town were suggestive of their value. Of course we sought out the magnificent fringe of green on the north of the city, where we soon found the Big Blue, winding around between borders of stately shade trees of all kinds. Here we also came across a nice house all buried in refreshing green. Nature had attended to the matter on two sides and the art of man on the others, where were rows of ornamental trees and a fine young orchard... We inquired who was the happy owner of that spot. "That! Why that belongs to Mr. Bickle."\(^6\)

This piece on Bickle in the Saline County News concluded with further praise of his home and a brief commercial note reminding readers that "J. C. Bickle has a well filled general store at Pleasant Hill, and is doing a splendid business."\(^7\) The series of descriptions of the successful entrepreneur, fine home, and beautiful domestic environment composed the image of the established, virtuous citizen in the new state.

The Gothic Revival ideal of domestic and civic virtue could be expressed on various socioeconomic levels in nineteenth-century America. Local builders and prospective homeowners seemed to have believed that the requisites of a large, impressive house in a pictur-
esque setting could be ignored as long as one's home had a signature feature of style—the Gothic window set in a central gable. Situated on a city lot, the one-and-a-half-story frame house at 718 North Tenth Street in Nebraska City makes that kind of claim (Fig. 5). This small, economical cottage, built about 1875, is a latter-day descendent of the I-house elevation and floor plan that reveals a remarkable tenacity in Great Plains carpenters to perpetuate a traditional house type, to which one could add preferred elements of style. Equal opportunity in America did not promise a classless society, but it did provide occasional for persons of various economic and social levels to aspire architecturally to status, virtue, and aesthetic taste.

Structure

Carpenters constructed the house at 718 North Tenth Street with new, industrially-produced building materials of standardized dimension milled lumber and cut iron nails. By the 1870s in Nebraska, these materials were readily available at local lumberyards as economical and efficient means to realize wooden frame structures of all kinds on various scales. It was not until the 1890s that this new way to frame a structure became rationalized into a system known as balloon frame construction (Fig. 6). In the structural logic of a balloon frame house, all the 2" x 4" studs that frame exterior and interior walls and the joists that support the floors are nailed together at sixteen-inch intervals. Studs in the exterior walls rise from sill to plate for elevations from one to two stories. Forty-eight-inch wood lathes that act as support for plaster walls and ceilings are nailed across three stud intervals. Windows and doors are proportioned to approximately thirty-two-inch widths to fit between two intervals of studs. Joists and studs, when nailed together at regular intervals, reinforce the frame at every point, resulting in a strong, basket-like structure. Exterior sheathing and siding further reinforce the frame. Properly mitred rafters nailed in place at sixteen-
or twenty-four-inch intervals receive rough roofing boards and a layer of wooden shingles to form the roof. A minimum of one skilled carpenter and an experienced helper sufficed as a building crew to assemble the light-weight members of a balloon frame.10

Evidence from Anglo-American rural 1-houses built in Nebraska from the 1860s to 1900 indicates that farmer/builders and local carpenters shared a tradition of craftsmanship and know-how that enabled them eventually to use the new materials in a consistent and reasonable method of construction. The addition of Gothic features to a house was a simple matter, compared to the transition from traditional ways of framing a structure to balloon frame construction. This process was not reflective of trends in aesthetics and style, but marked a revolution in thought and practice that paralleled the radical changes taking place in the industrialization of agriculture and the development of a market economy during the second half of the nineteenth century. The development of balloon frame construction marked a change more fundamental and enduring than preferences for architectural revival styles of the period.

Examples of the traditional 1-house type discussed in this study recapitulate many stages in the history of building with wood in America. Early portions of the first story of the Jesse C. Bickle house are exemplary of the frontier log cabin. Taking advantage of the stands of trees along the Big Blue River, builders constructed sill, joists, and walls of solid timbers. Bickle did subsequent sections of the house in substantial wooden frame construction. An 1-house in the eastern states the scale of the Bennett farmhouse would have been built in a timber frame, using mortise and tenon techniques to join and secure 8" x 8" posts and beams to 3" x 4" stud and rafter members. Housewrights sought ways to make this labor-intensive method of building more efficient and economical by using lighter members of the frame to simplify wall construction (Fig. 6).11 By the 1860s carpenters conceived the structure for the Bennett house in terms of the new materials and method of construction but conservatively retained
some qualities of heavier frames. The result is a braced frame of 2'x6' studs nailed to sill and plate eighteen inches on center in the front and back walls, and sixteen inches on center on the end walls of the principal unit. One can infer that the builders did not trust slender 2'x4' studs to adequately frame the larger section of the structure. They also braced the frame at the corners of the larger unit with diagonal members to insure its stability. The smaller scale kitchen wing is a balloon frame structure of 2'x4' studs sixteen inches on center (Fig. 2). The double wall where it adjoins the front unit suggests that it may have been a pre-existing structure on the site or moved there from another location.

Structural analyses of farmhouses built in Nebraska during the 1870s and 1880s reveal ways in which farmer/builders and local carpenters continued to transform the nature of the traditional I-house as they experimented with the new methods and materials of wood framing that would eventually become the standard balloon frame. About 1870 when a farmer in Pawnee County planned his farmhouse, he thought in terms of the traditional layout of rooms of an I-house. He did, however, build the entire house in a lightweight version of a wooden frame (Fig. 7). The farmer/carpenter apparently did not comprehend the potentials and limitations of milled lumber and nail construction. Instead of realizing the integrity of a balloon frame by running the studs continuously from sill to plate, he constructed the first story as a platform for the half story above.12 He retained a traditional division of elevation used in some earlier techniques of timber and braced frame construction, while using the lightweight members of a balloon frame. The north wall of the house, unfortunately, buckled against the winter winds at the point of junctures between stories.

A small, simple I-house in Otoe County built about 1880 provides a similar example in which a farmer/builder mixed old and new construction techniques that resulted in an unstable structure (Fig. 8). The sagging, exposed frame of the farmhouse reveals that the builder used 4"x4" posts at the corners of the frame and 2"x4" studs in the walls at intervals of eighteen or twenty-four inches. He also omitted external sheathing from the frame, and supported the house on its gentle slope on only eight slender, brick piers.

Nebraska farmers maintained the I-house type through the end of the century. By that time, the traditional house type appeared on a scale and in proportion inherent in the dimensions of lumber for balloon frame construction. A Clay County farmhouse built about 1900 displays the classic balance and symmetry of the I-house in its floor plan and also the logical proportions of a consistent, rational realization of a balloon frame structure (Fig. 9). Although the principal facade faces the country road, access to the dwelling is at the rear through two doors in the kitchen wing. A more casual welcome to the hearth of the home at the kitchen door replaced an entry to the front hall that led to the parlor or the sitting room. Further, the farmer/builder achieved a practical solution for conserving heat in the kitchen, dining room, and upstairs bedrooms by separating them from the parlor and designing the staircase as an enclosed passage. Access to the second story bedrooms is directly from and to the warmth and appetizing aromas of the kitchen.

The representative I-houses discussed
above are from a sample of twenty farmhouses in eastern, southern, and central Nebraska. These examples, and the entire group, indicate that builders practiced many local variations of framing techniques. During the first generation of settlers in Nebraska, no general consensus prevailed concerning what constituted a systematic approach to using the new materials of standardized milled lumber, and cut iron nails and, eventually, the new and improved wire steel nail. Sill construction varied widely from solid members measuring from eight to twelve inches and six by six inches to diverse configurations of 2" x 8" and 2" x 6" lumber in L or box configurations (Fig. 10). Studs were mortised and/or nailed directly to the sill, nestled in the L or box of the sill, or let-in to the vertical section of the L or box-shaped sill. A twelve-to-fourteen-foot length of stud determined the elevation of the front unit of an I-house to be a story-and-a-half. The requisite eight-foot ceiling more or less set the height for a one-story kitchen wing. Builders calculated the length and width of structures according to experience and knowledge of how to predetermine a regular placement of studs that would create a formal symmetry of the major facade and functionally align windows and central door with interior chambers. A carpenter could, therefore, place a series of studs at sixteen inches on center for a twenty-four-foot wall. He would begin and end a wall of twenty-eight feet with a twelve-inch interval before intermediate studs were set in a sixteen-inches-on-center sequence. It was possible to calculate these measurements before construction, learn the logic of balloon construction through practical experience, or ignore both methods and nail studs throughout the frame at irregular intervals.

The Bennett I-house can be used to compare the nature and significance of changes that began to appear when carpenters adapted the house type to lightweight frames of balloon construction (Fig. 1). Builders determined scale and proportion of the I-house according to the dimensions of milled lumber available at an economical cost. Ever frugal, the Anglo-American farm family and carpenter sought ways to cut costs. This tendency in planning and construction eventually reduced the socially prestigious broad facade and two-story elevation of the traditional I-house to the cozy level of a small cottage (Fig. 5). Builders abandoned the grand entrance to a center hall in favor of an expedient direct introduction into the parlor with a straight beeline access to the kitchen (Fig. 7). Orientation of the house on the site continued to offer the major facade to the country road, but an informal entrance on the wing from the farmyard lane became a convenient direct access to the kitchen (Fig. 9). Carpenters retained the front-unit staircase, but enclosed it to seal individually-heated rooms from unheated halls and chambers.

Fig. 9a. A one-and-a-half story Clay County, Nebraska, farmhouse built about 1900 displays the balance and symmetry of the I-house plan and also the logical proportions of a balloon frame structure. Courtesy the author

Fig. 9b. Elevation and plan, Clay County farmhouse. Courtesy the author
Farm families determined the size of rooms on almost equal proportions in these downscale I-house variants, indicating that domestic chores and family gatherings in the kitchen were on a par with formal social occasions in the parlor, guest room, or dining room. Family democracies and a Midwestern sense of equality refashioned the I-house type as home for everyone. Rather than setting the house apart from others by adding features of style, vernacular builders collectively worked out the potentials of balloon frame construction and created a congenial, regional version of the I-house type.

Fig. 10. Variations in balloon frame sill construction. Courtesy the author

The rural vernacular I-houses that provided the basis for this study share similar qualities of a moderate scale, economy and efficiency of construction, and simplicity of form and finish. These traits are more like family resemblances than features of an architectural style, such as the steep gable, pointed arch window, and vergeboards of the Gothic Revival. The inherent qualities of the farmhouses acted as factors influential in maintaining the I-house type as a preferred dwelling for the Anglo-American farmer in Nebraska. A desire to be a part of a rural community, and a need to conform to prevalent standards and tastes, seem to have been causes for the continuation and dispersion of the I-house type across the Nebraska landscape.

Close examination of farmhouses indicates that some farmer/builders of an ethnic group other than Anglo-American choose to construct a dwelling that appeared to fit the preference for the I-house plan and elevation. A farmhouse in Polk County resembles a typical, small scale, balloon frame I-house (Fig. 11). The dormers on the roof of the house are a practical means to achieve windows in the half story bedrooms and are not necessarily features of the Gothic revival style. These kinds of dormers are also found on many other I-house-type farmhouses in Polk County. The floor plans of the house show an asymmetry of chambers in the front section, with the stairs to the upper story tucked into the corner of the chamber on the right.

Unlike the I-houses considered in this study, this farmhouse was the result of three stages of construction. The first unit was an all-purpose kitchen with staircase to a sleeping room or loft above. August Auman, who emigrated from Germany to Nebraska, planned and built this initial wooden-frame shelter according standards of his northern European ethnic tradition. A space in which the preparation and sharing of food were combined with welcoming guests and visitors was a common feature among the regional variety of German vernacular building. Named as the Wohnkuche (the living room/kitchen) or the Fläzkuche (the entry kitchen), this chamber was essential to the well being of German and German-American domestic life. When completed in the second and third phases of construction, the external appearance of the Auman home did, however, conform to I-house models in its rural neighborhood considered as a proper farmhouse on the Nebraska plains.

Fig. 11a. August Auman, a German immigrant to Polk County, Nebraska, built this one-and-a-half story farmhouse between 1880 and 1910. In appearance it conforms to the I-house models of its rural neighborhood, but the interior retains distinctive German-American ethnic qualities. Courtesy the author
distinctive German-American ethnic qualities. Rather than fully assimilate to American ways, August Auman formed only the outward appearance of his home to the prevailing norm. Unlike Jasper Ware and Jesse Bickle, he adopted external qualities to his house in order to "fit in" and not to "stand out." Like his Anglo-American neighbors, he worked toward a rational use of the new materials to frame his house. The first unit of the house is a frame in which studs are placed approximately twenty-four inches on center. The later units of the house indicate a standard balloon frame construction with studs at intervals of sixteen inches on center.

The traditional Anglo-American I-house type in Nebraska underwent changes in external appearance through the addition of features characteristic of
the Gothic Revival style. A revolution in building methods and materials, however, affected a more essential transformation in the structure and meaning of the house type, while maintaining its traditional form. While accretions of style tended to mask the vernacular origins and nature of the house type, the unadorned, wooden frame versions of the I-house built in rural Nebraska reinterpreted the meaning of the prestigious house type to communicate a shared know-how and a mutual lifestyle through simple form and rational method. The skill of local builders is evident in the way they solved planning and construction problems with a wonderful practical genius. It is appropriate to recognize the qualities of these structures and admire the intelligence and skill of their builders. These seem worthy of praise and lasting significance in qualities enduring beyond the passing fancy of a facile acquisition of style.

Notes


3 *Portrait and Biographical Album of Otoe and Cass Counties, Nebraska*, 2 vol. (Chicago: Chapman Brothers, 1889), 1:270. As reported in this biography, Ware’s lineage parallels the transfer of the I-house from England to the United States and to the Midwest. His grandfather was born in England, his father in Virginia, and his own birthplace was Kentucky. Ware came to Nebraska in 1857 and built his home shortly after his marriage in 1861.


5 Ibid., 95–121.

6 *Saal County News*, July 29, 1876.

7 Ibid.

8 This house is similar to the farmhouse in Eldon, Iowa, that acted as a backdrop for Grant Wood’s *American Gothic*. The universal recognition of that painting has aided in the identification of the Gothic Revival style based upon minimal features.


12 Another explanation for this kind of “platform” frame might be that local sawmills could cut only shorter lengths of studs and joists because trees milled in this area of the state were not of sufficient size (or longer dimension boards). Platform frame construction developed in the 1850s when prefabricated, ready-to-assemble houses were designed by firms such as Aladdin Homes of Bayport, Michigan. Shorter studs meant greater economies in milling frame members, as well as cost savings in packing and shipping a readymade house to the building site. See Peterson, *Homes in the Heartland*, 250, 283.

13 Wire nails became available in the United States as early as 1850, but they were not widely used by carpenters, who doubted their holding power. These early versions of wire nails did not have ridges in the shaft near the head that would secure them in the fiber of the wood. John I. Kempel, *Building with Wood and Other Aspects of Nineteenth Century Building in Central Canada* (Toronto: University of Toronto Press, 1983), 99–102.