

JAMES L. GARVIN
FARRINGTON HOUSE

30 South Main Street · Building 1, Suite 201 · Concord, New Hampshire, 03301
james@jamesgarvin.net <http://www.james-garvin.com>

**NOTES ON THE BUILDING OF MOULTONBOROUGH GRANGE NO. 197
OWNED BY THE MOULTONBOROUGH HISTORICAL SOCIETY**

JAMES L. GARVIN
AUGUST 2, 2012

The following notes are based on a brief inspection of the Moultonborough Grange building on the morning of July 27, 2012. Present at the inspection were Judith A. Ryerson and Norman Atkinson of the Moultonborough Historical Society; Cristina Ashjian of the Moultonborough Heritage Commission; preservation contractor Stephen P. Bedard, representing the New Hampshire Preservation Alliance; and James L. Garvin. The purpose of the inspection was to develop an overview of the structural condition of the building, to review its evolution and significance, and to define areas where further investigation, evaluation, and treatment will be required in order to ensure the preservation of the structure.



Moultonborough Grange No. 197, looking northwest

The Moultonborough Historical Society has posted manipulatable 360-degree views of the eight principal rooms of the building, and individual photographs of the basement, at:
<http://moultonboroughhistory.org/MHS%20Online%20Tour/Grange%20Hall/MHS%20Tour%20of%20the%20Grange.htm>

Summary: The Moultonborough Grange building reportedly began its existence as a dwelling in Melvin Village in Tuftonboro.¹ The building is said to have been moved on the ice of Lake Winnepesaukee in the winter of 1854 from Melvin Village to Moultonborough Village. The structure was thereupon enlarged with a kitchen wing and was placed in use as a tavern. Moultonborough Grange No. 197, established in 1893, acquired the property in 1894. In the first years of the twentieth century, the Grange transformed the building from a dwelling or tavern to a characteristic Grange hall, removing a central chimney and partitions to create a kitchen and dining room on the first floor and an auditorium or lodge room on the second story.² The Grange electrified the building in 1917 and in 1921 installed a wood-burning warm air convection furnace at the center of the first story to heat both that story and the hall above. The Grange cared for the building throughout the twentieth century, making the property a center of social and fraternal life in Moultonborough Village. When the Grange diminished in membership and in its capacity to maintain the structure, the organization offered the building to the Moultonborough Historical Society for a token fee. The society took title to the property and assumed responsibility for its preservation and interpretation on December 26, 2006, "subject to a restriction, which shall run with the land, that the exterior appearance of the Grange Hall building . . . shall remain unchanged, provided, however, that changes may be made which are consistent with the existing character of the building and are consistent with the US Secretary of the Interior's 'Standards for the Rehabilitation of Historic Properties', or such successor standards as may in the future be the generally accepted standards for rehabilitation or modification of historic structures in the State of New Hampshire."

The structure is now exhibiting signs of deterioration and structural distress, notably in the visible spreading of its eaves and the sagging of its roof planes.³



Rear elevation, Moultonborough Grange building, showing distortion of the roof, August 2, 2012.
Photo courtesy of Cristina Ashjian.

¹ "Moultonboro Grange," typescript, Moultonborough Historical Society.

² Dan Heyduk, "Passing Time: Moultonboro's historic Grange," *The Meredith News*, July 26, 2012.

³ Josiah H. Bartlett "Grange Hall Building," memorandum to the Moultonborough Historical Society, 8 June 2012.

The Moultonborough Grange building is significant in the architectural and social history of Moultonborough, and now requires detailed evaluation to define its structural characteristics and needs, and to develop preservation and maintenance plans to ensure its long-term wellbeing.

Description: The Moultonborough Grange building is a two-story, two-room-deep framed dwelling standing over a full basement. Although the central chimney of the structure has been removed, a square, freestanding chimney base of dry-laid fieldstone and split stone remains in the basement, providing a platform for the convection warm-air furnace that heats the building from the first story level. The building has a gable roof and its façade faces southeast. Attached to the northeast end elevation is a two-story wooden wing with a half-hipped roof.

The exterior of the building retains an early or original entry “porch” with Doric detailing and features that are characteristic of the federal architectural style of the early 1800s. Much of the clapboarding of the façade, and perhaps the other elevations of the building, appears to date from the same period and to remain on good condition.



Front entry, displaying a federal-style front door and a Doric entablature.

By contrast, the doorway of the added wing is an excellent and characteristic example of a frontispiece in the Greek revival style. Together with surviving interior features of the wing, this doorway denotes a mid-nineteenth-century date for this portion of the building. From the basement, the wing can be seen to have an independent frame and to have been placed adjacent to the frame of the original building.

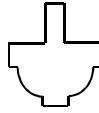


Doorway of the added wing, displaying characteristic Greek Revival detailing.

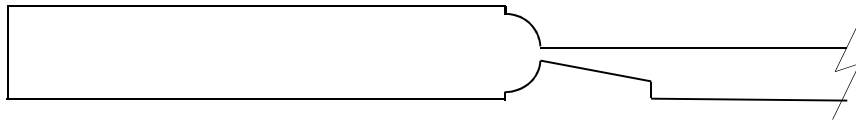
The basement walls of the building are constructed of natural and split fieldstone to the level of the exterior grade. Above grade, the building is underpinned with split granite slabs, hammered to a true face on the exterior. Splitting marks for the underpinning stones are not evident on the front or side elevations of the building. Underpinning stones on the rear and beneath the wing reveal the marks of plug drills, denoting a date after circa 1830 and apparently indicating that the rear of the building, perhaps originally underpinned with rough stone, was improved with split slabs when the wing was added to the main building. Although the chronology for the evolution of the building, as understood by the Grange, may be questioned (see below, “Possible Evolution of the Building”), the likely date of the wing and the new stone underpinning is 1854, a date that has been mentioned in efforts to explain the evolution of the structure.

The first story of the building retains original joinery or finish carpentry in parts of the front entry and the two front rooms, and the fragmentary physical evidence in these areas is useful in establishing a date of construction for the building, subject to refinement through deed research and other documentary or physical evidence that may be disclosed through further investigation. Apart from the surviving joinery at the front of the first story, partitions and interior finish,

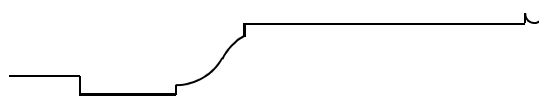
including all traces of the main stairway, were removed from this level when the first floor was transformed into the Grange kitchen and dining room shortly after 1900. At this time, the original nine-over-six window sashes of the building were replaced by two-over-two sashes with modern muntin profiles, and many original door casings were replaced by modern “sides of trim” of flat boards. Original muntins survive in the transom sash and sidelights of the front entry, and display this characteristic federal-period profile:



Where original joinery survives on the first story, it provides evidence that the northeast front room, to the right of the front entrance, was finished in a conservative style that utilized many of the details of eighteenth-century joinery.

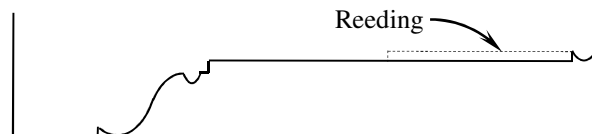


Profile of doors and sliding window shutters on the northeast side of the building, reflecting a conservative, eighteenth-century style, although the six-panel doors have a federal-style panel arrangement.



Profile of door and window casings on the northeast side of the building.

By contrast, the parlor to the left of the front doorway was finished in an elaborate and imaginative variation of the federal architectural style, employing reeded casings around the door and window openings and a room cornice having a frieze decorated with reeded triglyphs that echo those employed on the exterior of the front entrance.

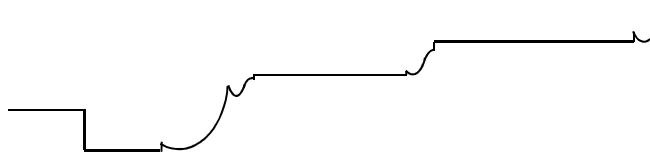


Profile of door and window casings in the former parlor on the southwestern side of the building.



Reeded window casing and entablature with reeded triglyphs in the former parlor on the southwestern side of the building, partly obscured by a staircase leading up to the back of the second-story stage.

In a similar vein, the door casings seen in the front entry display an elaborate federal-style profile:



While the first story of the building offers these stylistic clues, the second story of the building was entirely remodeled just after 1900. Conversion of this story into a meeting hall for the Grange entailed the removal of all partitions at this level, the blocking and covering of a secondary triple-run staircase that formerly rose in the northeastern corner of the building, the construction of a stage and a new access stairway to the stage area in the southwestern corner of the building, the removal of all tie beams at the eaves level of the structure to allow the creation of a raised hall ceiling, the probable removal of the original roof frame and substitution of a

frame of sawn common rafters (to be verified), the replacement of all windows with two-over-two sash units, the sheathing of the interior of the room with double-beaded "ceiling board," and the laying of a hall floor of matched southern yellow pine. This transformation created a stylish modern hall, but erased any visible clues to the original date or subsequent evolution of the building. As noted above and below, the removal of the original tie beams that linked the front and rear walls of the building had deleterious structural consequences that are yet to be assessed fully.

Possible Evolution of the Building: The theoretical evolution described below is based on the superficial examination of surfaces and features that are visible on the interior of the building. There are several additional methods of investigation that could supplement this evaluation, including drawing nails from various elements in order to date the nails, removing coverings to examine hidden structural elements, paint analysis, and discovery of original building fragments hidden or reused in areas of the structure. Deed research or other documentary research, including perusal of local newspapers during the tavern era or at the time of purchase by the Grange, also has the potential to reveal important information.

As noted above, it has long been believed that the Moultonborough Grange building began its existence as a structure in Melvin Village in Tuftonboro, and that it was moved on the ice to Moultonborough Village in the winter of 1854 and converted to a tavern, continuing in use as a public house during part of the latter nineteenth century until being acquired by Moultonborough Grange No. 197. The Grange carried out an extensive remodeling just after 1900, giving the building the internal form that it retains with little obvious subsequent change. No one seems to know when the building was supposedly built in Melvin Village.

Based on the physical evidence described and illustrated above, it appears that the original two-story, center-chimney dwelling dates from the early 1800s, perhaps between 1800 and 1810. It is possible, of course, that the frame or carcass of the building is older than this and that the building was remodeled with new interior joinery and a new entry porch in the early 1800s, but thus far no evidence, such as hand-forged nails and hand-forged H or HL hinges or door latches, has come to light to suggest an earlier date.

The only suggestion that the original house pre-dated the early 1800s is provided by the old-fashioned, raised paneled joinery in the northeastern front room of the house, now the Grange kitchen. This woodwork, fashioned with tools that might have been used in the 1700s, visually suggests an older date. Yet the six-paneled doors in this room display the panel arrangement that is typical of the federal architectural style of post-1800, suggesting that these doors were deliberately fashioned with conservative detailing yet with a modern panel arrangement. It was not uncommon to find the deliberate use of old-fashioned detailing in subordinate rooms of houses built in the early 1800s.

By contrast with the conservative detailing seen in the northeastern front room, the southwestern room was both modern and resplendent in its display of the federal style. As shown above, the moulding profiles used in this room, and in the adjoining entry or front stair hall, are complex and costly, requiring much labor and offering a sophisticated and urbane command of the new style. It is clear that this room was the parlor of the original house, and it is likely that the parlor

chamber, which would have been situated directly above, likewise exhibited very attractive modern woodwork. With the wholesale removal of the workmanship of the original joiner or joiners, we can only guess at the full visual impact of the best rooms.

If we accept the hypothesis that the house was built shortly after 1800, the next question is whether it is likely that the dwelling was built in Tuftonboro, or whether it has always stood on the existing foundation. Several attributes of the existing foundation suggest that the foundation and the house are contemporary and that the building was not moved from Tuftonboro to Moultonborough in 1854.

As noted above, the foundation under the main house was built with fieldstone, either natural or split, below grade. Above grade, the house is underpinned with granite slabs, hammered on their outer faces to a flat surface. No splitting marks are easily seen on these underpinning stones, but it may be assumed that the granite under the front and sides of the house was split with flat wedges, a method employed before about 1830.

The chimney base at the center of the basement of the main house is a massive square foundation built of dry-laid stone and filled with stone and earth.

The foundation and second chimney base under the wing of the house, which may be linked stylistically with the date 1854 (the only specific date connected with the building), differ visibly from the comparable features under the main house.⁴ The foundation of the chimney in the wing is a well-built brick vault of a type that was commonplace in more urban locales during the early 1800s. As noted above, the underpinning stones of the wing, as well as the underpinning stones along the rear wall of the main house, are clearly split with plug drills, evidence of a date after circa 1830. Thus, it appears that the rear wall of the main house was given renewed support when the wing was added to the main building and the cellar of the main building was extended under the ell.

Since the underpinning of the front and end walls of the main house displays a different character from that of the wing, it seems clear that the main foundation predates the foundation under the wing. Since a house would not have been moved across the ice with its massive chimney intact, it is reasonable to assume that if the main house had been moved from Tuftonboro in 1854, it would have been supplied on its arrival in Moultonborough with a new chimney and a new chimney base that would have matched the brick vault under the chimney in the wing. Instead, we see a massive stone foundation which seems to denote an earlier date.

Thus, the visible differences between the masonry of the main house and that of the wing, and the stylistic linkage of the wing with the remembered date of "1854" strongly suggest that the ell was added to the main house at about that date. Since this ell provided a second kitchen (later

⁴ The date "1854" is given in the following statement from "Moultonboro Grange," typescript, Moultonborough Historical Society: "According to Beverly Person, the last leader of the Grange, Ernest Berry told her late husband that around 1854 this building was moved across the lake from Melvin Village (on the ice) but he did not know where it was located there [in Melvin Village]. In 1856 it was a Tavern for the stage coach line from Concord to Conway, and continued to be that for many years."

used by the Grange as a woodshed) and a well-finished kitchen chamber on its second floor, the part of the story that this building was converted to tavern use in 1856 seems to be supported.

Significance: The Moultonborough Grange building has two primary areas of significance: 1. architectural significance as a tavern building and as a Grange hall, and 2. social significance as a Grange hall.

1. Architecturally, the Grange building retains the outward attributes of a tavern and the interior appointments of a classic Grange hall. The building exhibits the characteristics of a two-story, two-room-deep, central-chimney dwelling of a type that was commonplace in New Hampshire from about 1725 to about 1825.⁵ The reported conversion of the building to a tavern in 1854 seems to be reflected in the two-story wing that was attached to its northeastern end elevation. As noted above, the large, vaulted fireplace base under this wing reveals the wing's original function as a kitchen. The approximate date of the wing is revealed by its characteristically Grecian joinery. Although the story that the building was moved from Melvin Village in 1854 may be apocryphal, 1854 seems entirely plausible as the date when the wing was added to the main building.

This change apparently supplanted or augmented the original kitchen fireplace of the house, which would have been located at the rear of the central chimney. Taverns typically had capacious kitchens for the extensive cooking that was required of a public house. It was not uncommon for taverns to have two cooking fireplaces and two brick ovens in order to serve a function that was comparable to that of a modern restaurant or food caterer.⁶ Other attributes that may have revealed the adaptation of the building as a tavern, such as a bar for dispensing liquors or a ballroom, were lost when the interior was thoroughly reconfigured for service as a Grange hall shortly after 1900.

As it stands today, the building exhibits the classic attributes of a Grange hall. As required by the Grange ritual and by the social life that centered upon the Grange as an institution, Grange buildings strove to provide certain amenities. These features might be disposed differently in different buildings, especially those that were adapted from other building types for Grange use. But almost all Grange halls in New England include a lodge room or auditorium, a raised stage, and a kitchen for the preparation of meals. Wherever possible, these buildings also include a dining room that is separate from the hall or auditorium, and a cloak room. In most Grange buildings where it was feasible, the kitchen and dining room are located on the first story, and the hall or auditorium on the second, as in Moultonborough.

⁵ For a discussion of the origins and evolution of this enduring New Hampshire house type, see Lisa Mausolf with James L. Garvin, National Register nomination, Benjamin James House, Hampton, New Hampshire, on file at the New Hampshire Division of Historical Resources; and James L. Garvin, "Nathaniel Foye House, Foye's Corner, Rye, New Hampshire," February 23, 2003 (revised April 2, 2003), on file at the New Hampshire Division of Historical Resources.

⁶ For a description of cooking arrangements in New Hampshire taverns, see Donna-Belle Garvin and James Garvin, *On the Road North of Boston: New Hampshire Taverns and Turnpikes, 1700-1900*, 2d. ed. (Hanover, N. H.: University Press of New England, 2003), especially Chapter 2, "The Tavern Building" and Chapter 8, "Tavern Entertainment: Food and Drink."

2. In its social context, the Moultonborough Grange building is one of approximately forty-two Grange halls that survive in New Hampshire. It is thus a significant local representation of a national movement that had immense social and economic significance in the history of the United States and the state of New Hampshire. Long a cherished institution in New Hampshire's rural life, the Grange is now uniformly in decline as the state's agricultural economy weakens, as innumerable opportunities for social interaction and entertainment supplant the older fraternal institutions that provided such benefits, and as the median age of Grange members increases. As an artifact of a movement that is passing away with little general recognition of its importance or its demise, the Moultonborough Grange building deserves understanding and responsible planning for its preservation and interpretation.⁷

The Grange, or Patrons of Husbandry, was a powerful social movement. The National Grange was founded by Oliver Hudson Kelley in 1867. One purpose of the fraternal order was to promote the economic interests of farmers, who were suffering from declining influence as manufacturing and mercantile interests grew predominant in the monetary and political life of the United States. A second purpose was to promote education, fellowship, and socialization among rural people, who often suffered from isolation and social sterility. A major farm depression in the 1870s spurred an explosive growth of subordinate, or local, Granges, especially in the Corn Belt and wheat-growing states of the northern and central plains. In these states, the Grange was seen as an active vehicle for agricultural organization in opposition to high rail tariffs and other forces that threatened the survival of farmers. In these states, the "Granger Movement" was a powerful, contentious, but short-lived phenomenon that ended with passage of some reform laws but faded quickly with the return of agricultural prosperity in the late 1870s.⁸

In New England, by contrast, farming had long been in decline yet remained a prevalent characteristic of rural society. Farmers maintained a relatively even, if modest, tenor of life, and were not troubled by sudden and disruptive outside influences on their economic existence. The principal concerns in rural New England were farm abandonment, aging of the farming population, isolation, loneliness, and decline in rural land values that made it increasingly hard for property-tax-dependent towns to maintain services. Beginning in 1873, farmers in a number of towns in New Hampshire established local or subordinate Granges. On December 22, 1873, representatives of fifteen subordinate Granges met in Manchester and established the New Hampshire State Grange.⁹

While the Grange in the West had burned itself out in short order, the Grange in New England grew slowly but steadily. In New England, the pledge of the Grange to enhance education, strengthen family life, improve agricultural practices, and provide mutual support had a deep appeal to an agricultural society that seemed to be witnessing its own disintegration after centuries of steady growth. New Hampshire Grange leaders like Nahum J. Bachelder, governor of New Hampshire and Commissioner of Agriculture around the turn of the twentieth century,

⁷ For a discussion of Grange meeting rooms, rituals, and lectures, see Rexford Booth Sherman, "The Grange in Maine and New Hampshire, 1870-1940" (Ph.D. dissertation, Boston University, 1973), pp. 43-44, 72, 79-80, and Sherman, "The New Hampshire Grange, 1873-1883," *Historical New Hampshire* 26 (Spring 1971): 13. For a national context, see D. Sven Nordin, *Rich Harvest: A History of the Grange, 1867-1900* (Jackson: University Press of Mississippi, 1974), especially Chapter 6, "Grange Social Activities."

⁸ Rexford Booth Sherman, "The Grange in Maine and New Hampshire, 1870-1940," pp. 39-49.

⁹ *Ibid.*, pp. 58-60.

were also prominent in movements to return population to abandoned or semi-abandoned farms and to improve rural roads, thus linking the Grange with other progressive efforts that were of deep interest to rural people.¹⁰ The Grange was therefore central to New Hampshire's attempt to preserve and strengthen its rural and agricultural traditions. In 1897, 19,116 people belonged to the Grange in New Hampshire. The *New England Homestead* proclaimed that "this state represents the best organized body of farmers ever before known in the United States, and very probably in the world."¹¹ By 1900, the New Hampshire Grange reportedly had 25,000 members and collectively held 7,000 meetings each year. Today, New Hampshire Granges reportedly have 3,000 members.

Recommendations for Further Investigation: The evaluative report by Josiah H. Bartlett of June 2012 and observations made on July 27, 2012 agree in identifying certain major issues concerning the Moultonborough Grange building. These center on two matters: water infiltration or condensation, and the resulting effects of moisture on parts of the building; and incipient structural failure of the roof of the main building.

Water infiltration into the basement, and the consequent raising of levels of humidity throughout the structure, has apparently been addressed in part by the closure of a water line that was observed to be leaking in the basement.¹² Yet the earthen floor of the basement remains saturated, and is probably wet at all seasons of the year except when frozen. This has resulted in the decay of many of the first floor sleepers or joists, a number of which have been "sistered" with modern sawn scantlings. Similarly, some of the original supporting girders have been replaced by modern sawn members.

Excessive dampness has also resulted in pronounced frost action during cold weather. The foundation wall at the north (rear) of the building has shifted or bulged, resulting in the tipping and subsidence of some of the granite underpinning stones above the fieldstone lower walls. Similarly, frost action has undermined the northern abutment of the brick vault that supported a kitchen fireplace at the northeastern end wall of the added wing. This lack of support jeopardizes the survival of this well-built arch.

Much of the water that saturates the basement floor can be attributed to roof runoff that finds its way back into the building through the dry-laid foundation wall, partly due to absence of eaves gutters and an insufficient slope of the grade away from the house. Some of the dampness may be due to a perched water table or other attribute of the soil of the neighborhood, a common source of seasonal standing water under buildings with earthen cellar floors. The soil maps for the Moultonborough area should be studied to ascertain whether underlying soil geology is partly responsible for the excessive dampness in the basement.

It is common in older buildings, as well, to discover that much basement water results from the migration of humid summertime air into basement spaces that remain below the dewpoint. The

¹⁰ George Franklyn Willey, ed., *State Builders: An Illustrated Historical and Biographical Record of the State of New Hampshire* (Manchester, N. H.: The New Hampshire Publishing Corporation, 1903).

¹¹ Quoted in Rexford Booth Sherman, "The Grange in Maine and New Hampshire, 1870-1940," p. 87.

¹² Josiah H. Bartlett "Grange Hall Building," memorandum to the Moultonborough Historical Society, 8 June 2012.

condensation of water from moisture-laden outside air is a frequent cause of saturated basement soil and of decay to joists or sleepers overhead.

Diagnosis of the sources of basement dampness, and suggested methods of reducing or eliminating that dampness, should be components of further studies of the Moultonborough Grange building. Detailed attention should likewise be paid to the structural results of frost action on the foundations of the building and chimney, and plans for stabilizing and repairing foundations should be developed and implemented as soon as possible.

The second major structural problem faced by the building is evident in the photograph on page 2 of this report. The spreading of the front and rear walls, and the subsidence of the roof planes, are serious conditions that seem to have developed, or greatly accelerated, during the recent past. As noted in the Bartlett report, this condition jeopardizes the safety of the building. It should be diagnosed and remedied, at least through temporarily stabilization, before the winter of 2012-13. Loss of the roof would make the continued preservation of the Moultonborough Grange financially difficult if not impossible, violating the intent of the perpetual preservation easement that runs with the land and is quoted, in part, on page 2 of this report.

The original support system for the roof of the original center-chimney dwelling would have been substantial and capable of resisting snow and wind loading for an indefinite span of years. The original roof would have been supported at the end walls of the building, as it still is. It would also have been supported near the center of the structure, where load-bearing partitions on both sides of the chimney would have continued throughout the first and second stories, supporting the lateral tie beams that would have linked the front and rear walls of the building at the original attic floor level. The front and rear walls would also have been tied together by additional tie beams that lay under the attic floor between each end-gable wall and the chimney bay.

All of these connections were removed when the high ceiled Grange hall was created after 1900. Two steel rods with turnbuckles were substituted for the original four internal tie beams, probably creating a structural system that was never technically adequate to resist the outward spreading tendency of the roof planes. Now, with failure of the anchorage of these steel ties, the walls have spread noticeably and the roof has distorted and subsided.

The only access to the upper roof area, above the auditorium ceiling, is a small trap door in the ceiling above the rear of the stage. Lacking a means of access to this trap door, we do not know the exact character of the existing roof system. It will be crucial to understand the nature of the present roof structure in order to design a remedy for its incipient failure.

The evenness of the roof surfaces suggests that the entire roof of the original building—rafters, purlins, and sheathing boards—was removed shortly after 1900 and replaced by a roof of sawn common sawn rafters (probably 2" by 10" or 2" by 12"), covered with horizontal sheathing boards. From the slight exposure of the rear wall plate where sheathing has pulled away at one of the steel ties, it appears that the original hewn plate and its planed board casing were retained in place but hidden behind the furred-out ceiling board wall. It will, of course, also be crucial to explore the anchorage at the ends of the two steel ties to determine how this anchorage has

failed. This will entail the careful removal of areas of the tongued-and-grooved ceiling board, which appears to be blind nailed through the tongues and will require extra care during removal.

It is the strong recommendation of this report that stewards of the Moultonborough Grange building make every effort to obtain the funding necessary to explore these problems thoroughly and to remedy them, at least by temporary measures, before the onset of the winter of 2012-13. To leave the building in continued jeopardy would violate the preservation clause that was inserted in the deed by which this property was transferred in 2006 from Moultonborough Grange No. 197 to the Moultonborough Historical Society.