



HVVA tour of Rensselaer County: The tying joint in Pittstown and Hoosick.
19 May 2012

Introduction

The “English tying joint” otherwise known as “normal assembly” or the “three-part tying joint” is a framing strategy commonly encountered in buildings constructed in parts of England and its colonies. In the United States, it survives in buildings dating from the 17th thru early 19th centuries, particularly in Massachusetts and Connecticut. There are however, several known examples in New York State, with a cluster of structures located in northern Rensselaer County and southern Washington County. We will be looking at three of these structures today.

The three-part tying joint is a connection in which the top plate of a wall, the tie beam, and wall post all intersect in one sophisticated joint. This form of joinery is much more complex than framers who used the New World Dutch system of framing engaged in, and when done well is a thing of beauty (Figure 1). The posts in this framing system are frequently flared toward the interior at the point of juncture with the other two framing members; this facilitated the fabrication of the joint without requiring that the entire post be of massive size.

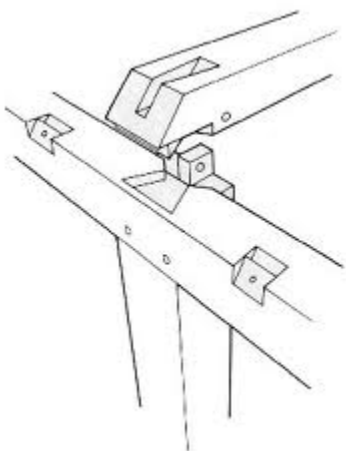


Figure 1. The three-part tying joint, seen from outside, and above.

This profile has frequently been referred to as a “gunstock” post, for its similarity to the outline of a stock of a gun. A good primer on this framing type and its use in Connecticut is found in Isham and Brown’s *Early Connecticut Houses* (Isham and Brown 1900). Cummings has provided a history of the use of the tying joint in Massachusetts Bay (Cummings 1979).

This framing system was, as noted, favored by builders within the New England cultural hearth, and was used other areas as folks spread from those initial settlement areas into New York and beyond. Its appearance in northeastern Rensselaer County may be tied to Massachusetts, or may have as its source the settlement of Scots-Irish in adjacent parts of Washington County, who arrived in large numbers—chiefly from Connecticut—after the close of the Revolution.

Other examples in the region (not on today’s tour) include a three-bay threshing barn in the Town of Easton, in the southwest corner of Washington County. In that example, tying joints are used at the corner posts but not for the interior posts on each of the long sides—a drop tie joint is used to connect both pairs of those posts. Other examples are known in the towns of Jackson and White Creek, both in Washington County. A house, outside of the hamlet of Coila and within the town of Jackson, was featured on an HVVA tour in 2010. This dwelling, constructed around 1800 for the Hills family, features a remarkable array of tying joints used—not in association with the conventional “box frame”, but with a bent frame (Figures 2 and 3). This improbable (and very difficult) framing system was used not only in the main portion of the house, but in the flanking wings constructed some time (soon) afterward—suggesting the hand of the same builder for all three phases of construction.



Figure 2. The Hills house, Coila Vicinity, Town of Jackson, Washington County (all pics by W. R. Wheeler unless noted otherwise).



Figure 3. View in the attic of the Hills house, looking at the tops of six of the tying joints—from among 24 used in the main house and almost 30 more used in the two wings. In this one example, the use of “gunstock posts” was eschewed so that the posts could be concealed within plastered walls.

Another example in the Town of Jackson, on the O’Donnell Hill farm, also visited as part of our tour of Washington County in August 2010, is a three-bay threshing barn which features the three-part tying joint associated with pocketed braces (Figures 4 and 5).



Figure 4. View of the three-bay threshing barn, with later one-bay addition to the right, on the O’Donnell Hill farm, Town of Jackson.



Figure 5. Typical joint in the O'Donnell Hill barn. The flared top of the "gunstock" post is particularly evident in this shot.

Another example of this framing applied to the construction of a house is known in Spencertown, Columbia County. Other outlying examples include a barn identified in Otsego County by Henry Glassie in the 1960s, between Cooperstown and East Springfield, NY (Glassie 1974:206).

The Tour

Site 1—5154 State Route 7, Hoosick Falls, NY

Tammy's Candy Kettle, owned by Tammy & Charley Morgan, is a family restaurant where Tammy's homemade chocolate is featured. They rented the property for 19 years and have owned it for 5 years. There were a couple of prior owners, but the Haswell family owned the farm for generations.

The Morgans own two photos of cavalry encampment on the farm of the 15th US Cavalry (dated 1906 & 1907). The photos show the English barn as well as a couple of barns that no longer exist. Next door to their home and restaurant is the English tie beam barn, the oldest known barn in Hoosick and an unusually large English tie beam barn (Approx. 74 ft. X 30 ft.). Behind the English barn is a later period timber framed structure.



Figure 6. View of the threshing barn (Connie Kheel photo).



Figure 7. Detail in the Morgan barn (Connie Kheel photo).

Site 2—Cipperly Barn, 364 Spicer road, Hoosick Falls

Carl Cipperly's English tie beam barn is on what he calls the Siemens farm. It is a property that Carl's family purchased close to 50 years ago to expand their dairy operation. It's now used for hay storage and livestock shelter. The farmhouse which went with the barn is located a small distance away and is still owned by the Siemens family. Carl's farm is about a half mile from the English tie beam barn. Carl will be able to talk about how the barn was used or was altered over the years.



Figure 8. The Cipperly (Siemens farm) barn (Connie Kheel photo).



Figure 9. Interior of the Cipperly barn (Connie Kheel photo).

Site 3—Nipmoose, 59 Sherman Road, Buskirk, Pittstown

Nipmoose is owned and operated by The Persistence Foundation (<http://persistencefoundation.org>), a not-for-profit 501(c)3 established in 1996, “dedicated to the dual mission of conserving agricultural lands and preserving agricultural heritage.” The Nipmoose site includes a group of outbuildings: two very interesting barns—one of which features a variation on the tying joint in its construction (the “gunstock” posts being turned to be in-line with the exterior walls)—a corn crib and a bent-framed house (currently stripped to its frame on the interior), plus some of the best views this side of heaven!



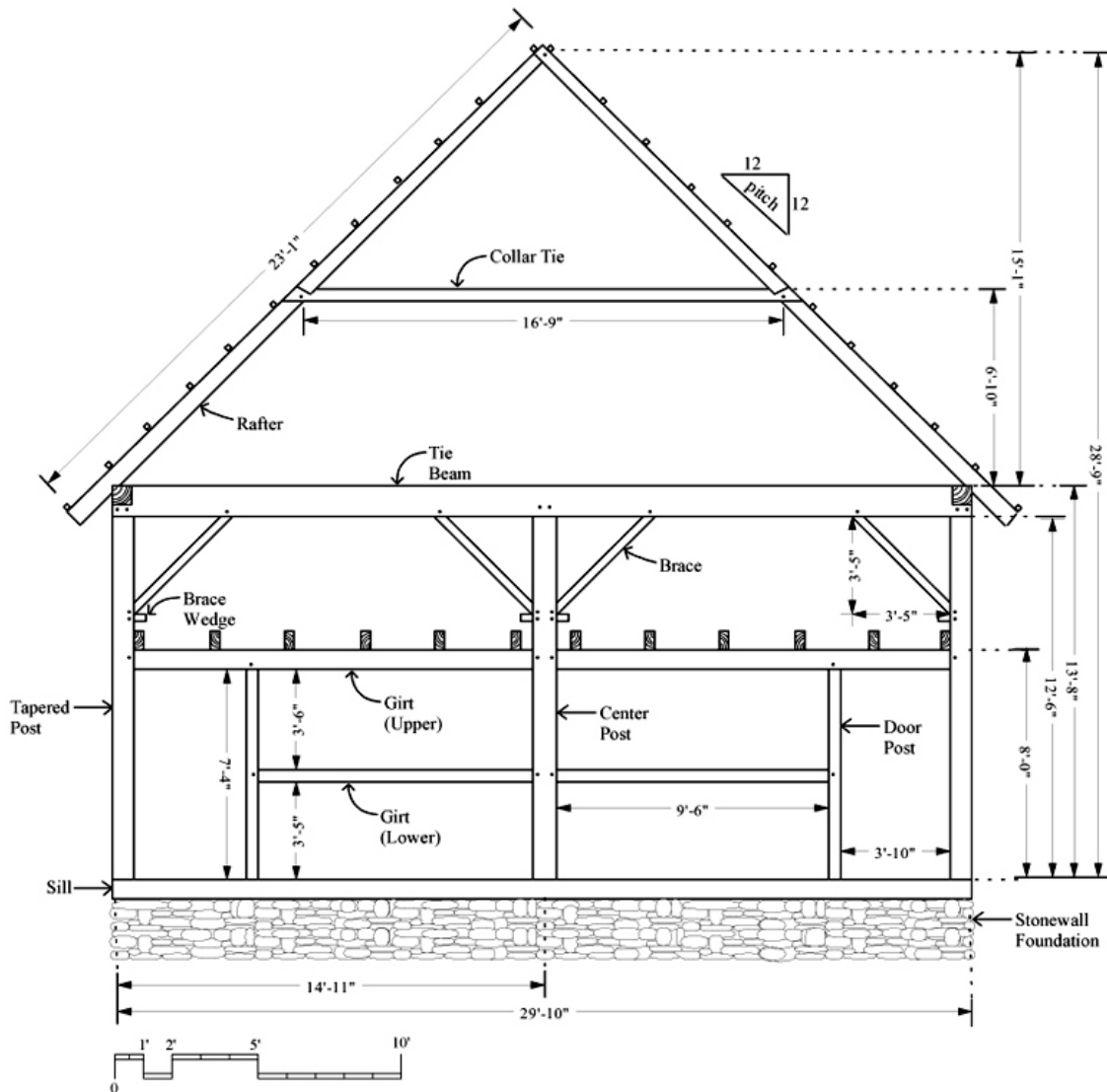
Figure 10. General view at Nipmoose, with the corn crib and two barns.



Figure 11. View of the tying joint barn at Nipmoose.



Figure 12. View of a typical joint during the restoration of the barn. Note the marriage marks incorporating a circle and slashes of the race knife, just below the lower part of the joint (Photo courtesy Connie Kheel).

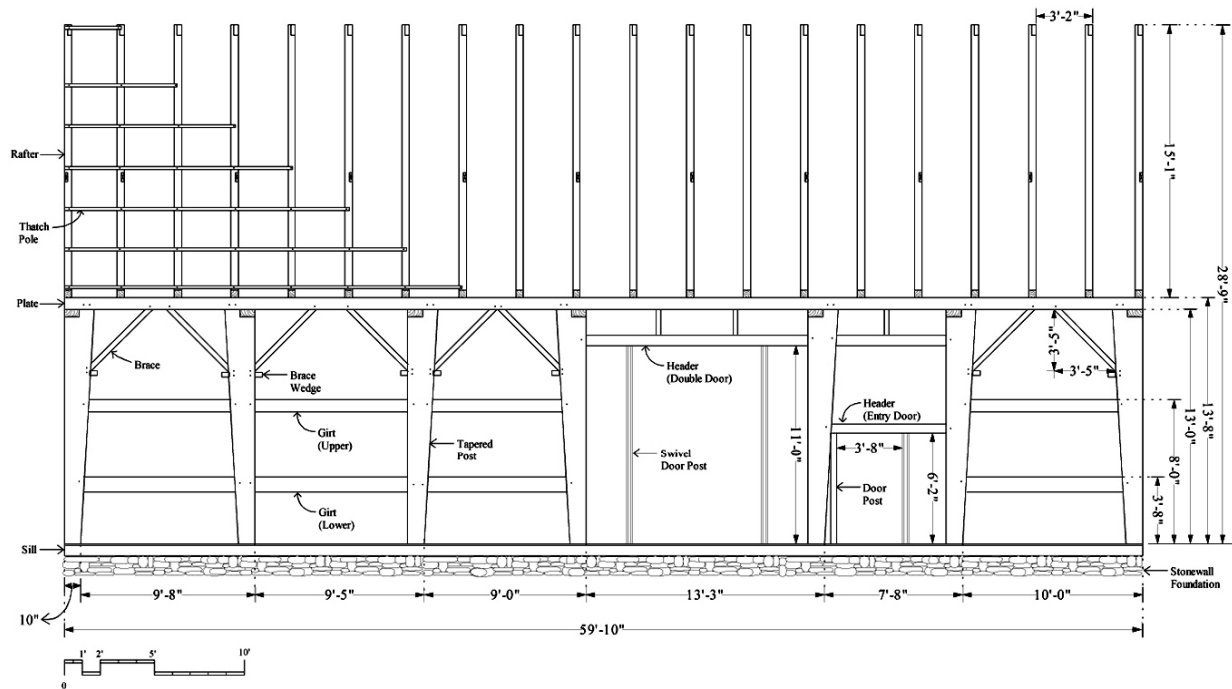


BEAM DIMENSIONS: WIDTH AND DEPTH

- Brace:** 5 in. wide x 3 in. deep
- Brace Wedge:** 4 in. long x 3 in. high x 1 in. deep
- Center Post:** 11 in. wide x 9 in. deep
- Collar Tie:** 6 in. wide x 5 in. deep
- Girt (Lower):** 5 in. wide x 5 in. deep
- Girt (Upper):** Tapered 8 in. wide x 8 in. deep at base
- Rafter:** Tapered 8 in. wide x 5 in. deep at base
- Door Post:** 6 in. wide x 6 in. deep

- Sill:** 9 in. wide x 9 in. deep
- Stonewall Foundation:** 2 ft. high x 2 ft. deep
- Tapered Post:** Width 9 in.–11 in. (base and top); depth ranges from 12 in.–14 in. at base and 18 in.–19 in. at top
- Thatch Pole:** 2 in. wide x 2 in. deep
- Tie Beam:** 13 in. wide x 10 in. deep

Figure 13. Sectional drawing of the tying joint barn at Nipmoose (Drawing by John Cooney).



BEAM DIMENSIONS: WIDTH AND DEPTH

Brace: 5 in. wide x 3 in. deep
Brace Wedge: 4 in. long x 3 in. high x 1 in. deep
Door Post (Entry Door): 6 in. wide x 4 in. deep
Girt (Lower): 10 in. wide x 8 in. deep
Girt (Upper): 8 in. wide x 8 in. deep
Header (Double Door): 8 in. wide x 7 in. deep

Header (Entry Door): 8 in. wide x 6 in. deep
Plate: 8 in. wide x 8 in. deep
Rafter: Tapered 5 in. wide x 8 in. deep at base
Sill: 9 in. wide x 9 in. deep
Stonewall Foundation: 1 ft. high x 2 ft. deep

Swivel Door Post (Octagonal): 6 in. wide x 6 in. deep (Double Doors);
 4 in. wide x 4 in. deep (Entry Door)
Tapered Post: Width ranges from 9 in. – 14 in. at base
 to 15 in. – 19 in. at top; depth 9 in. – 11 in. (base and top)
Thatch Pole: 2 in. wide x 2 in. deep

Figure 14. Side elevation of the barn (Drawing by John Cooney).



Figure 15. The house at Nipmoose farm. Probably dating to the early 19th century, this house makes use of bent framing in its construction (Connie Kheel photo).

Sources

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Thanks to the owners of the buildings on today’s tour, and in particular to Connie Kheel, who really did most of the work in arranging the tour (including providing some of the text for this handout)—and who provided the wonderful refreshments!

W. R. Wheeler
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