DUTCH BARN PRESERVATION SOCIETY NEWSLETTER



FALL 2015

VOL. 28, ISSUE 2

Revisiting Richard W. Babcock's Norumbega Barn: The Continuing Search for the Origins of the Swing-beam Barn

by William E. Krattinger

Synopsis

In 1983 the late Richard W. Babcock (1934-2014) made headlines when he announced the discovery of a building he termed the Forest Chapel-and which he variously referred to as the French or Norumbega barn-located on Breese Hollow Road in Hoosick, Rensselaer County, New York. Babcock interpreted this structure as a legacy of a sixteenth-century French presence in that area and evidence of the mythical settlement of Norumbega, a theory which was roundly dismissed by historians.¹ The 36' by 49' building was subsequently dismantled by Babcock and moved to Hancock, Massachusetts, where it was destroyed by fire in 1994, along with the New World Dutch barn in which it was stored. Photographs of the barn, along with measured drawings, fortunately survive to portray its physical characteristics. After viewing drawings of the frame by Jack A. Sobon, a onetime associate of Babcock, my curiosity was aroused by the building's unusual features, in particular its swing-beam bent, which physical evidence sug-

gested originally incorporated a king post in its construction. In the fall of 2014 I endeavored to identify the barn's former site which, once found, made it possible to trace the history of the farm as a means of contextualizing the building and reanalyzing it, not as a relic of French settlement later converted to an agricultural function, but as an early manifestation of the swing-beam barn type (Photo 1). While lost to fire it nevertheless remains one of a very small number of identified scribe rule swingbeam barns for which information exists, including three located in adjacent southern Washington County. Given the relatively small number of scribe-rule examples of this barn type identified to date in New York State and elsewhere, this regional grouping of early examples may prove critical in understanding the development of the swing beam type.

While Babcock interpreted aspects of the barn's marriage mark system and unusual post-to-sill corner braces as being of French derivation, features such as the triple bypass joinery, illustrated previously by Sobon, suggest



Photo 1. View of farmstead on which the Norumbega barn was located (author 2014).

other cultural origins.2 Of considerable interest, given the building's unconventional features and deviation from standard typologies, is its location in a region that was settled at an early date by peoples from both the New World Dutch and New England cultural hearths; "Dutch Hosac," a settlement laid waste twice during the mid-eighteenth century, was nearby, as were farms settled by the time of the Revolution by people of Connecticut, Rhode Island and Massachusetts lineage. The property was not, as Babcock thought, within the Manor of Rensselaerwyck, but instead on land contained within Schneyder's Patent (1762), one of three large land grants that form the balance of the present-day Town of Hoosick. It is this author's present hypothesis that the early swing-beam barn type, exemplified by the so-

Norumbega Barn (continued from page 1)

called Norumbega barn, may not be a typology reflecting a particular cultural affiliation, nor place of Old World origin, but is instead a native building form developed in response to regional circumstances. The region of New York in which the Norumbega barn was built, with its early settlement history, diverse ethnic complexion, and accessibility to the Hudson River for marketing its grain, would seem to offer the appropriate context for just such a development.

Also bolstering this possibility is an increasing body of information that demonstrates that New World Dutch and New England-derived building traditions didn't exist in isolation in New York State, but sometimes merged to create a creolized vernacular. While the traditional New World Dutch and English barn were patent early forms there, other less precisely definable types were also constructed. Preeminent among these was the swing-beam barn, the origins of which remain unclear. The New World Dutch barn, with its commodious threshing floor conceived to process grain on a large scale, offers compelling parallels to the swing-beam barn type. The traditional English three-bay barn of the eighteenth century, by contrast, with a typically 30' by 40' plan accommodating a 12'-wide by 30'-deep threshing floor, was designed for flailing grain and did not afford sufficient space for treading grain with horses, a common manner of threshing in New World Dutch barns.

While it has been theorized that the swing-beam barn is of Germanic origin, it may ultimately be found that non-Northern Europeans played a role in the initial development of this type, in New York State, by adopting aspects of New World Dutch barn design and implementing them in a side entrance barn configuration. The identification of a six-bent 40' by 60' swing-beam barn in Easton, Washington County, the Fort barn, which employs English tying joints for its end bents, offers potential evidence to this effect. While similarities are to be found in

the earliest identified examples, they at the same time demonstrate the early form did not adhere to a specific arrangement or manner of construction, suggesting the possibility of diffusion across the region's ethnically diverse population.

Before dissecting specific aspects of the barn's construction it should be acknowledged that Hoosick was part of a larger region encompassing northern Rensselaer and southern Washington counties in which significant variation in construction attends even the most common forms, in some instances suggesting cultural cross-pollination, and there unusual and seemingly singular types are not unknown. Examples of the latter include a large $7\dot{2}'$ by 30' barn, the frame of which employs six bents with English tying joints, deviating from identified models. Considerable variation is evident in

the scribe-rule English barns of the region, as this traditional form was constructed in any number of different ways there, with a variety of tying joint-bent typologies and roof framing strategies.³ Given this circumstance, judgments relative to specific features of the Norumbega barn should be made carefully. Some aspects of the building are suggestive of New England building precedents, among them the triple-bypass joinery, the arrangement of bays and side-entrance configuration,⁴ and the vertical boarding that enclosed the frame.

The triple bypass joint was used in this region immediately after the Revolution, if not sooner, and occurred in an area that includes this part of eastern New York and adjacent areas of Vermont.⁵ Identified examples include the "Scottish barn," so-christened by Babcock, near Buskirk, Rensselaer County, and English barns in Pawlet and Shaftsbury, Vermont. Another, the Walter Field barn, an early example of the three-aisled New England barn type illustrated by Ritchie Garrison, indicates its use in northwestern Massachusetts, an area from which many settlers of southern Washington County came.⁶ James Sexton has demonstrated the use of this tying joint in Connecticut by the mid-eighteenth century, where it became an alternative to the traditional English tying joint. Despite being a complex joint requiring three tenons, it nevertheless solved the problem of the pulling out of the tie beam in the conventional English tying joint due to the shrinkage of the half-dovetail joint that typically locked the tie beam in place. In the instance of the Norumbega barn, its use allowed all the rafters to be of a uniform length, something not possible in the English tying joint system, which required the tie teams and their corresponding rafters to be positioned higher than the plate.

Physical Characteristics

Many aspects of the Norumbega barn's physical characteristics can be discerned from the material previously



Figure 1. Early 1980s aerial photograph of Rietz farm prior to barn's removal, showing its situation within the larger farm complex (courtesy Connie Kheel).

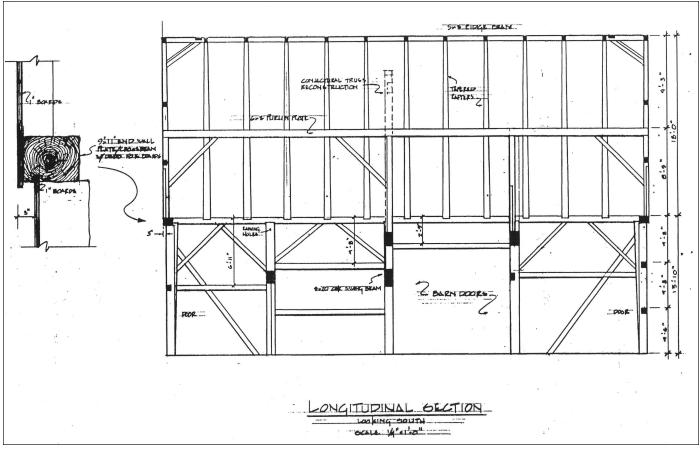


Figure 2. Norumbega barn, longitudinal section (courtesy of Jack A. Sobon, 1983).

published by Babcock, the reconstruction drawings by Sobon, and an aerial view of the farm predating the barn's removal.ii The farm from which the Norumbega barn was removed is located on the east side of Breese Hollow Road in Hoosick; the survival of two adjacent buildings that appear in photographs included in Babcock's published accounts allowed for ready identification of the site. The aerial photograph indicates that the barn was positioned to the northwest of the house, a short distance from the road, and was oriented with its roof ridge on an

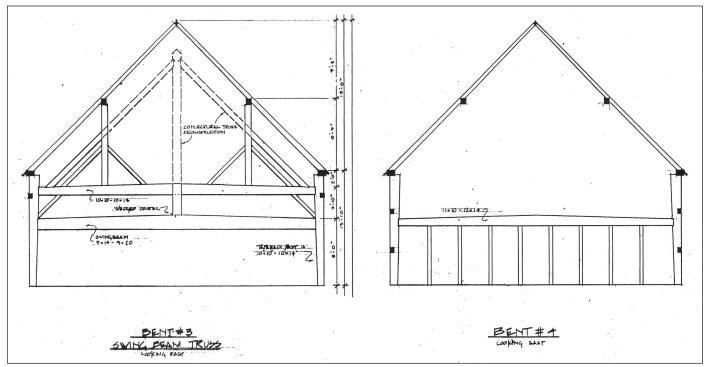


Figure 3. Norumbega barn, swing beam and stable bents (courtesy of Jack A. Sobon, 1983).

(continued on page 4)

Norumbega Barn (continued from page 3)

east-to-west axis, the longer eave walls facing north and south (Figure 1). This is presumed to be its original location, as the barn was built on a shallow foundation and not above an excavated basement, the latter oftentimes indicative of an earlier barn having been relocated in order to satisfy changing agricultural functions. The property retains a number of other buildings, among them a frame story-and-a-half dwelling with rear ell and a series of ancillary buildings.

The frame of the Norumbega barn was formed of five transverse bents that created a four-bay structure of rectangular plan, the longer side elevations measuring 49', the gable ends being 36.' The tripartite plan consisted of a narrow stable bay, a wide central threshing floor occupying the two center bays, and a hay mow. The internal bents were of the dropped tie-beam type while the end bents employed triple bypass joinery as illustrated by Sobon. Unusual were the large down braces, approximately 14' long, which extended from near the tops of the posts down to the sills; these were flush with the exterior of the frame and passed over horizontal girts positioned between the sills and plates. More conventional bracing was also employed at typical locations, such as between posts and the top plates, and in some locations intersected with the large down braces (Figure 2). The roof frame consisted of 13 pairs of tapered common rafters, sustained mid-span by purlin plates, and with housed birds-mouth connections with the plate. A ridge beam received the rafters at the roof's apex, with wind bracing present between the ridge beam and end rafters at the gable ends. The building's exterior was sheathed with vertical boarding, as opposed to the stud and weatherboard system characteristic of New World Dutch barns; grooves in the undersides of the plates and end-bent tie beams accommodated these, with a 3" overhang between the upper and lower boarding.

The center of the barn was given over to a substantial threshing floor spanned at mid-point by the swing beam. The swing-beam bent was thus described by Babcock:

The first architectural detail to catch my eye was a great swing beam, in a section of beams to the right of the entrance doors... Above it, another beam ran parallel. This one was smaller, with a brace at each end. Above that beam stood two purlin posts, bearing the weight of the roof. Smack dab in the middle of the great beam was a king post—something I'd never seen in a barn before. The king post was joined to the great beam with a half dovetail tenon. A locking wedge was driven in on one side. In the center of the dovetail was an oak peg that passed through the entire beam. At one time the king post rose to the roof, but had been cut off above the smaller cross beam.⁹

All of the posts—not just those associated with the end bents, which required two post tenons for the triple bypass joint—were tapered inwards, so as to be wider at their tops in the transverse plane. Both the swing beam and upper tie beam in that bent were hewn so as to have a crown at their center. The tie beam corresponding with the bent at the front of the narrow stable bay, which was also cambered, was positioned lower than the remaining tie beams and received studding (Figure 3). Approximately one-half of the plan was given over to the two-bay-wide threshing floor, indicating its importance to the overall functionality of the building.

The purlin plate with common rafter roof frame of the Norumbega barn reflects the conventional manner of framing New World Dutch barn roofs and had been broadly adopted for the construction of English barns in New York and parts of New England prior to the advent of square-rule framing. James Garvin indicates that common rafter roofs were employed in Connecticut and western Massachusetts at an early date, the result of interaction with the New World Dutch cultural hearth.¹⁰ The concept of a heavy purlin plate supporting common rafters had been used in Connecticut and other areas of New England in house construction, and more specifically in the framing of gambrel roofs. The ridge beam, another distinctive element of the barn, is a framing choice observed in examples of scribe-rule English barns in Salem and White Creek, Washington County, the latter area being in close communication with Hoosick. It is a feature with a range of European precedents, among them English and Dutch.

Dropped tie beams, like the common rafter system, were also adopted in New England at an early date. Sexton indicated their use at an early date for house framing in Connecticut, as part of the framing of large twostory houses with integral lean-tos.¹¹ Sobon surveyed an example of its use in a barn built prior to the Revolution, in Adams, Massachusetts, an area within the Hoosic River watershed.¹² They appear frequently in scribe-rule English barns in this region and were sometimes employed for all four bents of a three-bay structure, or otherwise in combination with tie-at-plate joinery. The hewing of tie beams with a distinctive camber, or what might otherwise be termed an arch or crown, appears to share strong associations with New World Dutch barn design and the manner in which the massive anchor beams of the center aisle were sometimes executed. This treatment continued to be used for swing beams in this region into the first quarter of the nineteenth century.

Among the Norumbega barn's most distinctive features were its large post-to-sill down braces and the king post of the swing-beam bent, almost all of which was removed at an unknown date for the installation of a hay track. While there are clear parallels with Germanic timber framing, the concept of large post-to-sill down braces is not peculiar to that tradition. Precedents are also found in historic English carpentry and in early New England house framing; the Boardman house in Saugus, Massachusetts, illustrated by Abbott Lowell Cummings in his classic work on Massachusetts Bay houses, is one example.¹³ Ascribing a clear point-of-origin for this feature is thus problematic. Precedents in barn construction include the Stryker barn, a dual swing-beam barn once located in Somerset County, New Jersey, and examples of Pennsylvania fore-bay barns.¹⁴ Most of the king post truss had been removed by the time the barn was dismantled and documented by Sobon; only the position of the central post and where it met the upper chords of the truss could be determined with certainty. While not a unique feature in New World barn design, the truss employed for the Norumbega barn is nevertheless one with few identified counterparts.¹⁵ In the vast majority of swing-beam barns surveyed in this region, of both scribe rule and square-rule construction, one or multiple struts (sometimes with bracing), connected the swing beam with the upper tie beam.

At the time the barn was dismantled, in 1984, unusual scribed compass markings were found on the top of the ridge beam. These consisted of a central circle with 13 rings, which was intersected by two smaller circles with daisy wheel motifs; the latter were centered on the outer ring and met the larger circle near the fifth-outermost ring. The meaning and purpose of these markings has not yet been determined.

Historical Background

The farm from which the Norumbega barn was taken was identified on the 1876 F.W. Beers map of the Town of Hoosick as Lot 14 of Schneyder's Patent ("Snyder" and "Schneider" variously), a 10,000-acre tract situated east of the Hoosick Patent, south of the Walloomsac Patent, north of the Manor of Rensselaerwyck, and adjacent to the present-day Vermont border. Maps indicate that the farm was owned in the period ca. 1854-1876 by Dr. John Warren (1806-1882), a prominent Hoosick physician who married Susan Helling Dimick (1809-1881), identified in an 1896 source as a granddaughter of Hendrick Schneyder (1721-1819), from whom the patent took its name.¹⁶ Warren came to Hoosick ca. 1825-26 and resided at Hoosick Corners, on the Troy-Bennington stage road, in a building previously kept as a tavern by David Wilcox.¹⁷ Both the Warren and Dimick families were of New England ancestry and had earlier intermarried in Connecticut. Dr. John Warren was born in Ashford, Windham County, Connecticut, as was Otis Dimick (1786-1830), father of Susan H. Dimick. Otis Dimick wed Sarah Snyder in Albany in 1808, and Susan H. Dimick was their only child.

As noted by N.B. Sylvester in his *History of Rensselaer* County, "Hendrick Schneider settled about 1762, on the south part of his patent, on a farm afterwards known as the Dimmick place, the Dickenson place, and in late years owned by Dr. John Warren. Mrs. Dr. Warren is a descendant of Mr. Schneider, the original patentee."18 Hendrick Schneyder, of German ancestry, was identified as a resident of New Jersey at the time the petition for the land grant that took his name was made, in 1761, as were all but one of the patentees. Other patentees from New Jersey joined Schneyder in settling these lands soon after securing rights in 1762, among them John Wetteck, Hendrick Lake, John Johnson and Garret Williamson. They were joined soon thereafter by other pioneers, some from the more immediate area, among them members of the Quackenbush, Ostrander, Helling, Patten, Palmer, Randall, and Cotterell families.¹⁹ Lands in the patent were owned outright by settlers or otherwise leased by tenants from landlords, a condition not uncommon in the early land grants of this region, among them the Pittstown and Cambridge patents.

An early map of Schneyder's Patent depicts lot 14;²⁰ it is not shown as being owned by Hendrick Schneyder at that date, but is instead depicted as being one of 11 lots under the ownership of Alexander Colden (1716-1774), Surveyor-General of the Province of New York and son of prominent colonial figure Cadwallader Colden (ca. 1688-1776). Schneyder was identified as the owner of three lots, among them lot 23, situated to the immediate northeast of lot 14; a portion of lot 23 adjoined the eastern boundary of lot 14. Alexander Colden's brother, David Colden (1733-1784), was identified as the owner of an additional seven lots consisting of 1,000 acres. Loyalist leanings required him to flee America for England at the end of the Revolution. One of David Colden's lots, not identified by number, was leased in 1767 "at 7.10 per annum, Rent to commence five years after ye Date." It was noted as the only of his seven lots rented to a tenant at that time.²¹ Lot 14 had apparently been sold by the time of Alexander Colden's death in 1774. There is no mention of land in Schneyder's Patent in Colden's will, which offered a somewhat detailed account of his various real estate holdings and how they would be dispersed among his heirs.²² Most of Lot 23 fell within the state of Vermont at the time that boundary was established.

Hendrick Schneyder's son, Nicholas Snyder (1750-1808), appears on the 1779 tax roll for the Hoosick or "Hosack" District, as do Henry—presumably Hendrick's son, Henry, Jr.— and Christopher Snyder.²³ Twenty years later, at the time of the 1799 Hoosick tax assessment, Nicholas Snyder and Henry Snyder were assessed, with Nicholas being the only one of the two claiming taxable real estate assets; the same situation is found at the time of the 1800 assessment. By 1802 Henry Snyder, Nicholas Snyder, and Nicholas Snyder, Jr. were all taxed as owners of separate dwellings and farms, with the elder Nicholas's farm being the most highly valued, as it was again in 1803. All three were noted as heads-of-household at the time of the 1800 Federal census, which additionally noted Nicholas Snyder, Sr. as the owner of a slave.

Nicholas Snyder married Susannah Helling (1751-1831). While not entirely clear, the Sarah Snyder (b. 1790) who wed Otis Dimick was possibly their daughter; if so, Susan H. Dimick was not a granddaughter of patentee Hendrick Schneyder, as noted in the 1896 source, but instead a great-granddaughter. Sarah Snyder was 18 at the time of her father's death and her marriage in 1808; one source indicates Nicholas Snyder died intestate, at which time his two minor children, Ulpianus and Sarah, were assigned guardians.²⁴ As for the patentee, Hendrick Schneyder, he was of advanced age by 1800 and presumably living in the household headed by his son Henry, Jr., which consisted of 11 individuals. He died in 1819, six years after his wife, Jane Hunter Schneyder (1729-1813).

The various documentary references suggest that the Norumbega barn was located on what was described by N.B. Sylvester in 1880 as the early Schneyder homestead.²⁵ Dr. John Warren appears to have kept his principal abode at Hoosick Corners, and his association with the Breese Hollow farm followed his marriage into the Dimick family. The Dimick's connection to the property presumably came with Otis Dimick's 1808 marriage to Sarah Snyder. Otis Dimick first appeared as a resident of Hoosick in the Federal census of 1820; 10 years prior both he and his father, Elias Dimick (1750-1839), were residents of Bennington County, Vermont. He was in

(continued on page 6)

Norumbega Barn (continued from page 5)

Hoosick by 1816, at which time he bore witness, along with Anthony J. Brees and Stephen Cobb, to the assignment of a guardian for two of Daniel Hallenbeck's daughters.²⁶ The Hallenbeck and Snyder families had intermarried, as Daniel Hallenbeck (1752-1813) had wed Gurtje Charity Snyder (1755-1836), a daughter of Hendrick Schneyder. In 1820 Otis Dimick was listed as a head of household in Hoosick engaged in agriculture, adjacent to the Hallenbecks, who lived to the immediate east of the subject property; the household consisted of Dimick, his wife and daughter, two other women—possibly Hallenbecks—and a female slave.

The Norumbega Barn: When was it Built and What Factors Influenced its Design?

In the absence of documentation, historians are left to speculate on when the Norumbega barn was erected. Jack Sobon ascribed a later-eighteenth century date to it, based on his first-hand familiarity with the building and its physical characteristics.²⁷ The barn's storage and threshing capacity suggests it was not a settlement-period structure but instead one built after a considerable amount of acreage had been brought under tillage, and likely after the conclusion of the Revolution, which signaled the end of a long period of conflict in the region. In neither form nor construction did it strictly adhere to New England or New World Dutch typologies, supporting the notion that it was built following a period of cross-cultural interaction in Hoosick, where cultural differences relative to agriculture and barn design existed at an early date. The information offered by the Hoosick tax rolls of 1799-1803 and the 1800 Federal census suggest the barn was part of the elder Nicholas Snyder's farm, which passed to Otis Dimick following his marriage to Sarah Snyder and Nicholas Snyder's death, both of which occurred in 1808. It is speculated here that the barn was built after the American Revolution and before 1808 for Nicholas Snyder.

A barn of this scale and layout is suggestive of grain cultivation on a considerable scale. With each passing year following the establishment of the first homesteads in Schneyder's Patent more land was brought under profitable cultivation and as such a greater quantity of grain could be produced, with increasing amounts of surplus to be brought to market. As early as 1750 Peter Kalm noted the importance of wheat farming in the larger Albany re-

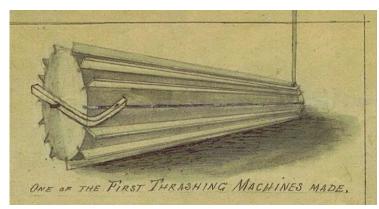


Figure 4. Drawing of a "thrashing" machine, by Rufus Grider (1899).

gion and the shipment of flour to the New York market via the Hudson River.²⁸ Grain threshing in this barn was presumably accomplished by treading with horses, a practice common in parts of early New York and one for which the New World Dutch barn and large swing-beam barns were well conceived. This process sometimes employed a vertical pole mounted between the threshing floor and the anchor or swing beam, to serve as a guide for the circular motion of the horses, with the grain being threshed either by the horses themselves or with a drawn device (Figure 4). Jeptha Simms, in his *History of Schoharie County*, offered a detailed description of how this process was sometimes undertaken:

Grain was thrashed, as it is at the present day [1845] by the descendants of those people who have no machines for the purpose, by the feet of horses. The process is simple. In the center of the barn floor, which is roomy, an upright bar is placed, previously rendered a pivot at each end, to enter a hole in the floor below, and a corresponding one in a beam or plank overhead. Through this shaft, at a suitable height from the floor, a pole is passed, to which several horses are fastened so as to travel abreast. A quantity of sheaves being opened and spread upon the floor, the horses are started at a round trot, thus trampling the grain from the straw... Persons in attendance, are constantly employed in turning and shaking the straw with a fork, keeping the horses in motion, removing any uncleanness, &c... Some use a roller to aid the process. This is a heavy, rounded timber, worked much smaller on one end then the other, with square pins of hardwood inserted at proper distances the whole length. The smallest end of this roller is so fastened to the shaft as to preserve the horizontal motion of one, and the perpendicular motion of the other, at the same time. To the heavy end of the roller, horses are fastened, drawing it on the same principle, that the stone wheel in an ancient bark mill was drawn. In threshing with horses, the roller is of great assistance.²⁹

Treading, or tramping or tromping as it was otherwise known, correlates with larger harvests and the desire to quickly process grain for market in the age before mechanized threshing. While more expedient than flailing grain, it nevertheless had the disadvantage of damaging the leftover straw, a potential consideration in choosing between the two processes. Treading was not a common

form of threshing in early New England, where instead the flail predominated. 30

Given the Schneyder's German ancestry and New Jersey background, it is tempting to surmise both as potential influences on the barn's design; recent scholarship suggests however that the swing beam barn this barn did not become common in New Jersey until the last quarter of the eighteenth century, after the family's migration to Hoosick. Efforts to definitively establish a link between swing-beam barns and early German populations—a concept first promoted by Babcock in his interpretation of the Kniskern barn—have proved inconclusive.³¹ It has already been demonstrated that the terms "Dutch" and "English" were used to describe barns

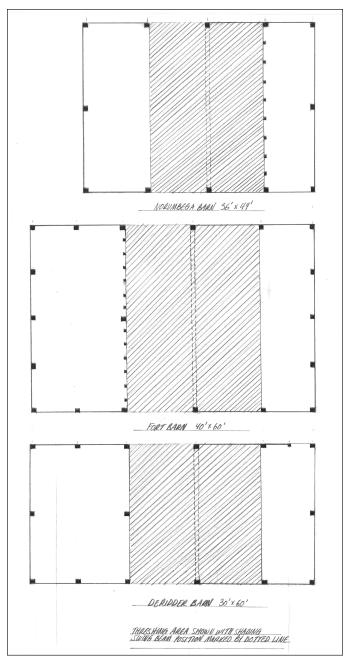


Figure 5. Comparison of the plans of the Norumbega, Fort and DeRidder barns; shaded area depicts area afforded for threshing and dotted line indicates position of swing beam (author 2015).

in eighteenth-century real estate advertisements, yet no such advertisements have yet been found describing a "German barn." While the type appears in areas settled at an early date by Palatine Germans, such as in the Mohawk and Schoharie valleys, scribe-rule examples also document its use at an early date outside of German-settled areas. These are among the factors which seem to discourage the notion of this building type being of distinctly German origin; the initial development of this typology may instead prove far more complex than a single-point origin. It seems just as likely that the Norumbega barn relates to developments closer at hand and to the complex cultural landscape of Hoosick the family entered upon migrating out of New Jersey.

Comparative Analysis

Recent survey work in southern Washington County has allowed for the identification of three swing-beam barns of scribe-rule construction, two of which were located in Easton, on the east side of the Hudson River corridor, within the 1684 Saratoga Patent.³² While the development of the type at the regional and state-wide level is not fully understood, a partial image of the swing beam barn in the Hudson-Hoosic river watershed has come into focus. During the first quarter of the nineteenth century swing-beam barns emerged as a recognizable typology in a region inclusive of southern Washington County and northern Rensselaer County, as evidenced by scores of examples thus far encountered there. These later versions, built using square-rule joinery and exhibiting standardized characteristics, indicate the evolving nature of this barn type and its broad regional adoption by that time.³³ The two scribe-rule Easton barns, while conceptually similar to one another in bay arrangement and the space afforded for expanded threshing floors, nevertheless display attributes not consistent with a single building tradition, and qualify as anomalies against the larger backdrop of identified typologies; how they influenced the latter class of buildings remains a matter of speculation. Both Easton examples subsequently had their swing beams removed, though in each instance definitive evidence of them remains. One was built in an area north of the Hoosic River near the Easton-Cambridge border, northeast of Schaghticoke, on a farm owned by the Fort family in the early nineteenth century, the other on the De Ridder farm, an early homestead located on the Hudson River across from Schuylerville, Saratoga County. Wheat farming was a principal agricultural pursuit in the Hudson-Hoosic region prior to declining steeply after 1830, by which time soil exhaustion, fungal and insect blights, and competition from new markets collectively took their toll. The Fort and De Ridder barns appear to have been built with threshing foremost in mind, and long before wheat farming's regional demise (Figure 5).

The Fort barn is located in the Beadle Hill area of Easton, on land owned by that family at the mid-point of the nineteenth century (Photo 2). Isaac Danielse Fort



Photo 2. Fort barn interior; view showing corner post w/ ETJ and adjacent dropped tie beam bent (author 2012).

(continued on page 8)

Norumbega Barn (continued from page 7)

(1724-1780), of French lineage, came to this area from Albany in 1763.³⁴ Isaac Fort's grandson, Lewis Fort (1803-1880), married Julia Hoag, whose family was part of a large Quaker migration to the area; the present ca. 1854 Greek Revival-style farmhouse in which they resided represents a later period of development, the barn being a relic of an earlier era. The land on which the barn is located was part of "Great Lot" 44 of the Saratoga Patent. These lands, originally leased to tenants, were by 1783 offered for sale by John Cochran, a relative by marriage of Philip Schuyler.³⁵ The owner of the property prior to Lewis Fort's tenure is not yet known. Many of the earliest settlers in this tier of lots in the southeast part of the patent were Quakers, among them the Hoags and Giffords.

Like the Norumbega barn, the 40' by 60' Fort barn was built with both tie-at-plate and dropped tie beam bents and a common rafter roof, the latter consisting of 19 common rafter pairs and corresponding purlin-plates. The end bents have English tying joints while the four internal bents have dropped tie beams. The now-removed swing beam was of substantial size, approaching two feet in depth, as evidenced by the mortises that once received it; the location of dual struts that connected the upper and

lower beams are also visible on the upper tie beam. The overall plan in essence consisted of a 20' hay mow, a 30' threshing floor, and a 10' stable area. The building is oriented with its roof ridge on a north-south axis, which appears to be the original condition, with one of its large flank entrances fronting on the road. A roughly 29'-wide by 40'-deep threshing floor was made possible by the swing beam, which spanned this central bay at the midway point; the original floor remains, consisting of longitudinally arranged planking held in place by square pins. Curious was the position of the swing beam, its underside having been not much more than six feet above floor level, leading one to question the possibility of using the floor for grain treading given the low clearance and the need to have animals pass underneath the beam as they trod.

The De Ridder barn is located on an early Easton homestead settled before the Revolution and can be definitively linked to that family (Photo 3); by all indications the barn was built during the lifetime of Simon De Ridder (1765-1832). Members of this family, three brothers, came to Albany from Holland in 1683. One of the three, Killian De Ridder, purchased a large tract of land in the Saratoga Patent in 1685, and it was in the northern



Photo 3. DeRidder barn (author 2010).

part of this land that the homestead was later established.³⁶ The De Ridder farm was located on a fertile expanse of land adjacent to the Hudson River, on presentday River Road, upon which many Dutch and German families settled. The Becker family, Palatine Germans from Schoharie County, settled on an adjacent farm in 1768, while Dutch families including the Van Burens and Van Schaicks occupied farms to the south. This narrow strip of Easton along the river, upon which these families settled, was culturally different from the interior areas of the same town, which were settled by large numbers of New Englanders and Quakers.³⁷

While the De Ridder barn is narrower in plan than the Fort barn, measuring 30' by 60,' it nevertheless presents a similar bay configuration, with a roughly 20' hay mow, 30' threshing floor, and 10' stable area. The De Ridder frame was erected with five bents. The broad spacing of the bents defining the hay mow was augmented by an additional post; in the case of the Fort barn, an additional bent was used at this location. The bents of the De Ridder barn were all of the dropped tie beam type, and a large amount of the framing material is pine or hemlock, unlike the white oak which was the principal material used in the Fort barn. The roof frame consists of 16 rafter pairs, without collar ties or purlin plates, birds-mouthed to the inside face of the plates.³⁸ A lapped half-dovetail present on the upper tie beam of the former swing-beam bent, which indicates the position of a downward strut, together with the empty post mortises, confirm the former presence of this feature, which was 7'-4" above floor level. Unlike the Fort barn, the framing exhibits a distinctly New World Dutch feeling, although the present system of studding and weather board is a later alteration, the building having been originally sheathed with vertical planks, a treatment more characteristic of English barns. The De Ridder barn appears to be on its original site, orientated with its roof ridge aligned on an east-to-west axis. Like the Norumbega and Fort barns, it was built on a shallow foundation.

Noteworthy in the context of this study is a barn in Pittstown, Rensselaer County, west of Hoosick and south of Easton and the Hoosic River, a 35' by 55' scribe-rule barn with eaves-wall entrance. It is a building that exhibits clear indicators of New World Dutch design. This barn appears to date to the tenure of the Devoe family on these lands, French Huguenots who first settled in Ulster County, New York, in the seventeenth century. The barn presumably dates to the lifetime of Peter Devoe (1738-1812), who is buried in an adjacent cemetery with a number of other family members. The frame, rendered almost entirely from white oak, including the rafters, was built with six bents which defined an 11' stable area, a 24' threshing floor, and a 20' hay mow. All bents employed dropped tie beams and the frame was studded out for weather boarding in characteristic New World Dutch barn fashion. It is of the flank entrance type, like the Fort and De Ridder barns, and in plan exhibits a similar arrangement of bays. This barn is of particular interest for the manner in which the central bay—housing the threshing floor— was expanded longitudinally. A swing beam was not employed; instead, two transverse bents with cambered tie beams were used to achieve a similar solution. The positions of these posts defined the 12'-wide entrance bay, and their clear-span tie beams afforded an additional six feet of space to either side of what was otherwise a 12' bay, thereby achieving the same practical advantage as a swing beam offset to one side. The roof frame has 13 pairs of common rafters sustained mid-span by purlin plates, the rafters meeting the inner face of the plate in a birds-mouth joint. The functional intent of the Deyoe barn seems clear: the desire to achieve expanded threshing space in a flank-entrance configuration.

This survey of regional examples demonstrates that efforts were being made to develop forms which would best suit localized farming requirements, which in the latter eighteenth and early nineteenth centuries centered on larger scale grain production. While dissimilar in construction, these three examples offer parallels in their adoption of side entrance configurations, and in plan, with roughly half their length given over to wide threshing floors. It is hard to deny the H-bent core of the New World Dutch barn as an analogous form, though a direct connection has yet to be documented. While examples of New World Dutch barns with double-anchor beam bents seem to offer a compelling if not direct precedent, those with which the author is familiar seem to have been built too late to have influenced the first class of swingbeam barns.

Conclusion

The locations of the Fort, DeRidder and Norumbega barns suggest the possibility of a related regional development of the swing-beam type, as all are located near the interconnected Hoosic-Hudson river watershed, and in an area where there was much familial and cultural interaction. These, along with the Devoe barn, were built in a region where both New World Dutch and New England building traditions were established at an early date, and where hybrid house and barn forms were common. The Norumbega barn, together with the other examples, speaks to the difficulty of assigning precise cultural descriptors to vernacular architecture in mixed-ethnic areas, where there was a free exchange of ideas and building concepts. Buildings such as the Norumbega barn defy attempts at simple categorization and speak to the complexity of the built environment and the various forces that shaped vernacular design in this era.

- ² Jack A. Sobon, *Historic American Timber Joinery: A Graphic Guide* (Becket, MA: Timber Framers Guild, 2002), 16.
- ³ An ongoing survey of scribe-rule English barns in this region indicates that bent typologies included those employing all tie-at-plate joinery, including English tying joints and other variants; those with all dropped tie-beams; and, perhaps the most common typology, those using a combination of English tying joints and dropped tie beams. Roof frame types include common rafters with collar ties; common rafters with purlin plates; common rafters with neither collar ties or purlin plates;

(continued on page 10)

¹ Richard W. Babcock and Lauren R. Stevens, *Old Barns in the New World: Reconstructing History* (Lee, MA: Berkshire House Publishers, 1997), 143-65; Richard W. Babcock, *Barns: Researched, Restored and Resurrected Using Ancient Raising Methods* (Richard W. Babcock: 1998), 18-34. Sung Bok Kim, chairman of the history department at SUNY Albany, and Abbott Lowell Cummings, professor of American decorative art at Yale University, were among those who questioned Babcock's interpretation at that time.

Norumbega Barn (continued from page 9)

and one example of a principal rafter-principal purlin-common rafter roof that was employed in concert with a frame using all dropped tie beams. Ridge beams were also observed, in both scribe and square-rule examples.

- ⁴ While the interior arrangement of space into three bays suggests direct English barn precedents, side entrance barns were by no means unique to Great Britain, as this form was not unknown in other parts of Europe, including Germany. It is nevertheless hard to deny the English barn's arrangement of space, particularly its narrow stable bay and much wider hay mow, divided by the threshing and drive floor, as the closer-at-hand precedent.
- ⁵ Sobon, *Timber Joinery*, 16, figs. 28-29.
- ⁶ J. Ritchie Garrison, *Landscape and Material Life in Franklin County, Massachusetts, 1770-1860* (Knoxville, Tennessee: University of Tennessee Press, 1991), 135-37. It bears noting that the three-aisled arrangement of the New England barn type suggests potential New World Dutch barn precedents. Sobon additionally documented one in Richmond, Berkshire County, in southwestern Massachusetts; see *Timber Joinery*, 16, fig. 30.
- ⁷ James Sexton, "Tying Joint Evolution, 1690-1790," *Timber Framing* 36 (June 1995), 12-13.
- ⁸ The author would like to thank Connie Kheel for providing a copy of this aerial image, which dates to the 1980s.
- ⁹ Babcock and Stevens, Old Barns, 145.
- ¹⁰ James L. Garvin, *A Building History of Northern New England* (Lebanon, New Hampshire: New England University Press, 2001), 12-15.
- ¹¹ Sexton, "Tying Joint Evolution."
- ¹² Sobon, *Timber Joinery*, 9, fig. 4.
- ¹³ Abbott Lowell Cummings, *The Framed Houses of Massachusetts Bay, 1625-1725* (Cambridge, MA and London, England: Belknap Press of Harvard University, 1979), 68-71.
- ¹⁴ For the Stryker barn see Elric Endersby, Alexander Greenwood and David Larkin, *Barn: The Art of a Working Building* (Houghton Mifflin Company, 1992), 190-94.
- ¹⁵ The author would like to thank the editor for bringing his attention to two additional examples that incorporate king posts into their frames, those being a 36' by 70' scribe rule barn once located in Greenfield, New Hampshire, and a 42' by 50' barn scribe rule barn dismantled in Perth, New York.
- ¹⁶ Map of Rensselaer County, New York (Troy, E.A. Balch, 1854); D.J. Lake and S.N. Beers, Map of Rensselaer County, New York (Philadelphia: Smith, Gallup & Co., 1861); F.W. Beers & Co., County Atlas of Rensselaer, New York (New York: F.W. Beers & Co., 1876); D.E. Wager, Our County and its People: A Descriptive Work on Oneida County, New York (Boston History Company, 1896), 193.
- ¹⁷ Nathaniel B. Sylvester, *History of Rensselaer County, New York* (Philadelphia: Everts & Peck, 1880), 369. This residence is depicted on the 1861 and 1876 maps.
- ¹⁸ Ibid, 365.
- ¹⁹ Ibid, 363.
- ²⁰ I am indebted to Charles Filkins, of the Hoosick Township Historical Society, for providing me with a copy of this map, which is in the collection of the New York State Archives.

- ²¹ Sessional Papers, Legislature of the Province of Ontario, Session 1905, vol. 37, part 11(Toronto: L.K. Cameron, 1905), 857.
- ²² "Abstracts of Wills, vol. VIII, 1771-1776," (New-York Historical Society, 1899), 225.
- ²³ "A Tax list of Hosack District" as transcribed by Leslie Potter from the original, maintained in the Lansing Family Papers at the New York State Library.
- ²⁴ Information researched and compiled by Barbara J. Jeffries; see "Schneider/Snyder IV," http://jeffriesb.tripod.com
- ²⁵ That likelihood would appear to be bolstered by the presence of Lafayette Dickinson on an adjacent property ca.1853-1865, seeming confirmation of N.B. Sylvester's account of "a farm afterwards known as the Dimmick place, the Dickenson place, and in late years owned by Dr. John Warren," *Rensselaer County*, 365.
- ²⁶ Dated March 5, 1816, probated September 18, 1816; vol. 5, p. 354, Rensselaer County Surrogate Office, Troy, New York.
- ²⁷ Sobon, *Timber Joinery*, 16.
- ²⁸ See David S. Cohen, *The Dutch-American Farm* (New York University: 1992), 115.
- ²⁹ Jeptha R. Simms, *History of Schoharie County and Border Wars of New York* (Albany: Munsell & Tanner, 1845), 84-85.
- ³⁰ J. Sanford Rikoon, *Threshing in the Midwest*, 1820-1940 (Indiana University Press, 1988), 1-19.
- ³¹ Gregory D. Huber, "The Swing-Beam Barn in the New World Dutch Cultural Hearth," *Dutch Barn Preservation Society Newsletter*, Spring 2011, vol. 24, issue 1; Babcock and Stevens, *Old Barns*, 96-100.
- ³² The third example, located in the Town of Argyle, Washington County, has not yet been fully documented and as such is not considered in this article.
- ³³ See Molly McDonald and William Krattinger, "The Swing-Beam Barn in Southern Washington County, New York," *Timber Framing* 103 (March 2012), 4-9.
- ³⁴ Kenneth A. Perry, *The Fitch Gazetteer: An Annotated Index to the Manuscript History of Washington County, New York,* vol. 1 (Bowie, MD: Heritage Books, 1999). Fitch indicated that Fort "came into the wilderness of old Cambridge three years before Deacon Whiteside." Phineas Whiteside, or "Deacon Whiteside," settled in the Cambridge Patent in 1766 after removing from Lancaster County, Pennsylvania.
- ³⁵ Real estate advertisement, New-York Gazetteer, 4 August 1783. This advertisement indicated that "The Northernmost half of Lott No. 44, in the Patent of Saratoga"—within which the subject property is located—was being offered for sale; it further indicated that "there are on the above Lott eight small tenements, with about 170 acres of cleared land."
- ³⁶ George W. and Gladys I. DeRidder, "History of the DeRidder Family, 1683-1949."
- ³⁷ See Jane B. Welling, They Were Here Too: genealogies of the owners of the Inn at Easton Corners and related families of southern Washington County and environs, State of New York (Greenwich, NY: Washington County Historical Society, 1963-71).
- ³⁸ A number of English barns with roof frames consisting of large common rafters without common rafter pairs or purlin plates have been observed in Pittstown, Rensselaer County.

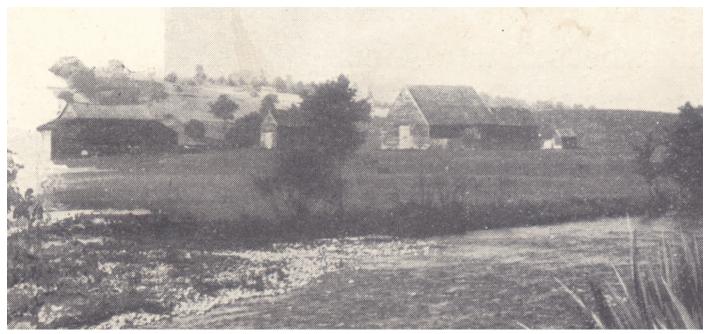
New World Dutch Barns in the Hoosick Valley

The following photographs are reproduced from Grace Greylock Niles' *The Hoosac Valley, Its Legends and Its History* (New York: G. P. Putnam's Sons, 1912). They depict three early New World Dutch barns in the valley and provide some context for the Norumbega barn. Unfortunately all three have been lost.

-The Editor



Gerrit Cornelius van Ness farm, St. Croix



Van Ness farm, St. Croix

(continued on page 12)

Images from the Past (continued from page 7)



Knickerbocker farm, Schaghticoke

DUTCH BARN PRESERVATION SOCIETY NEWSLETTER



This newsletter is printed by the Dutch Barn Preservation Society, a non-profit organization incorporated by the Regents of the State of New York.

Dutch Barn Preservation Society Board Members

Walter R. Wheeler, *President* Thomas Lanni, *Vice President* Keith Cramer, *Treasurer* Ned Pratt, *Secretary*

Robert W. Arnold III Keith Cramer Bob Hedges Greg Huber Paul Huey Thomas Lanni Bruce Nelson Ned Pratt Todd Rogers Alvin W. Sheffer Henry Vanderwerken Walter R. Wheeler Peter Sinclair, *Emeritus* *Editor:* Walter R. Wheeler (518) 283-0534 wwheeler@hartgen.com

Design & Printing: Modern Press

The Dutch Barn Preservation Society Mabee Farm Historic Site 1080 Main Street Route 5S Rotterdam Junction, NY 12150 www.dutchbarns.org

All memberships run from Jan. 1 to Dec. 31.

Membership: \$50. (supporting) \$35. (contributing) \$20. (regular) \$10. (student)

Organizational Membership: \$25.00

Individual Copies of Newsletter: \$2.00