

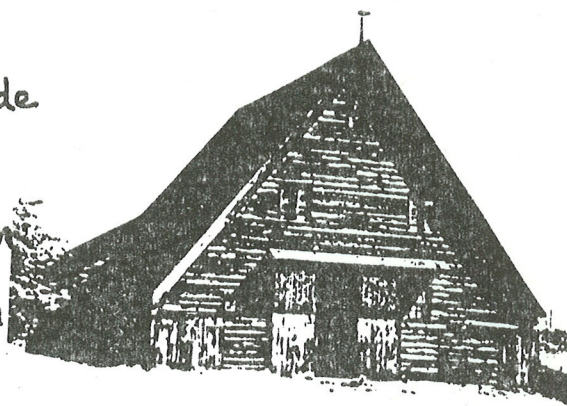
DUTCH BARN RESEARCH MISCELLANY

VOLUME III, No. 1, 1-34, 1990

This publication is planned to provide more information than can be included in the Newsletter of the Dutch Barn Preservation Society. The papers are based on the research activities, historical archive, field studies, barn measurements and collections of Members and others interested in the Dutch Barns of the Northeast. They are presented as unedited copy. It is hoped that this material will lead to a better understanding of the chronology, the builders and the utilization of these unique structures and the role they played in the settlement of the Hudson, Mohawk Schoharie Valleys of New York and parts of New Jersey.

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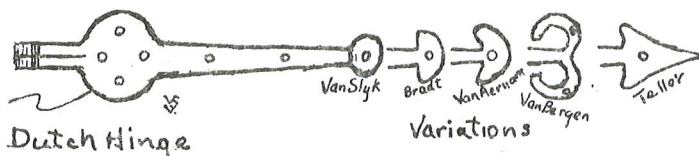
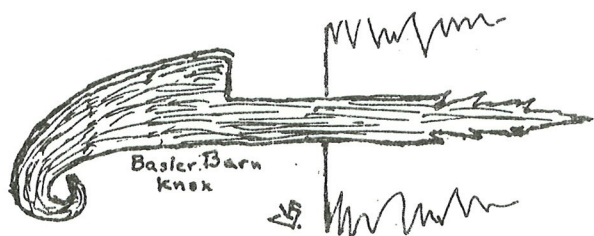
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Teller-Schermerhorn Dutch Barn 1701-1948



Wemple-Dellamont Co. 1712-present.



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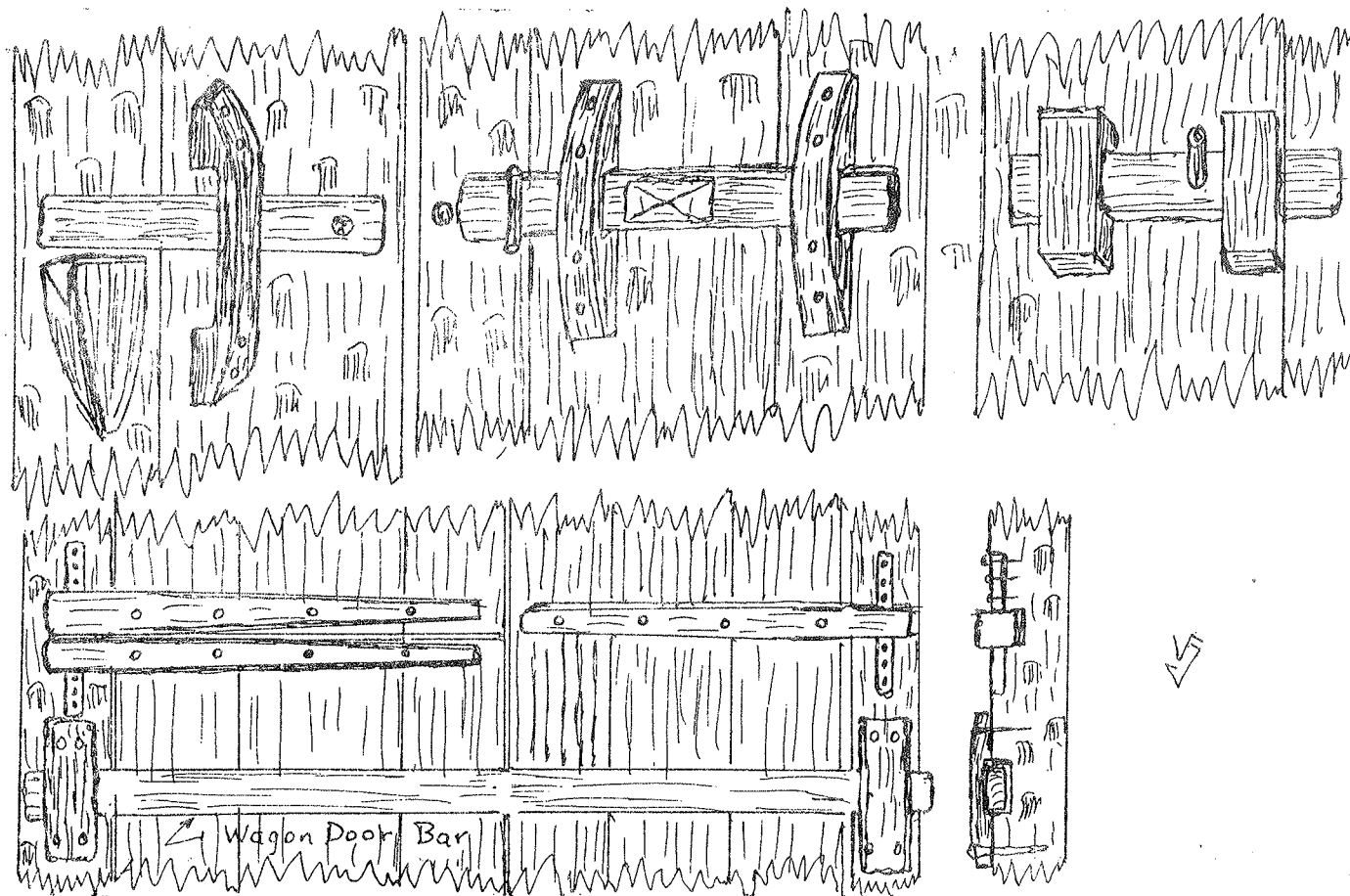
Small Wooden Latches in Dutch Barns

Among the smaller but beautiful objects in the interior of Dutch Barns are the wooden latches and bars which controlled the security of the granary and the large and small doors of the structure. These were generally made of oak or hickory and those that remain bear a beautiful patina polish from centuries of contact with human hands. Most of them, as shown in the three sketches, are extremely simple but very functional.

The swinging latch sometimes is installed on the animal doors. The retainer of the latch complex consists of a notched, round pin which projects through and beyond the inside of the timbered frame of the door and is held in place with a rectangular tapered wedge.

The latch is retained with a single slotted bracket which limits its movement within an angle of about 20° . This can be mounted on either side of the outward swinging door. A different sliding bar assembly is located on the inside of the animal door, is retained by two brackets and is generally manipulated with a projecting boss which is operated from the inside of the door.

Another simple latch is a miniature of that on the animal door and is generally located on the granary door. It is considerably smaller with a bar that is slid by grasping a pin which moves the bar held by two small wooden brackets.



The Ladders of Dutch Barns

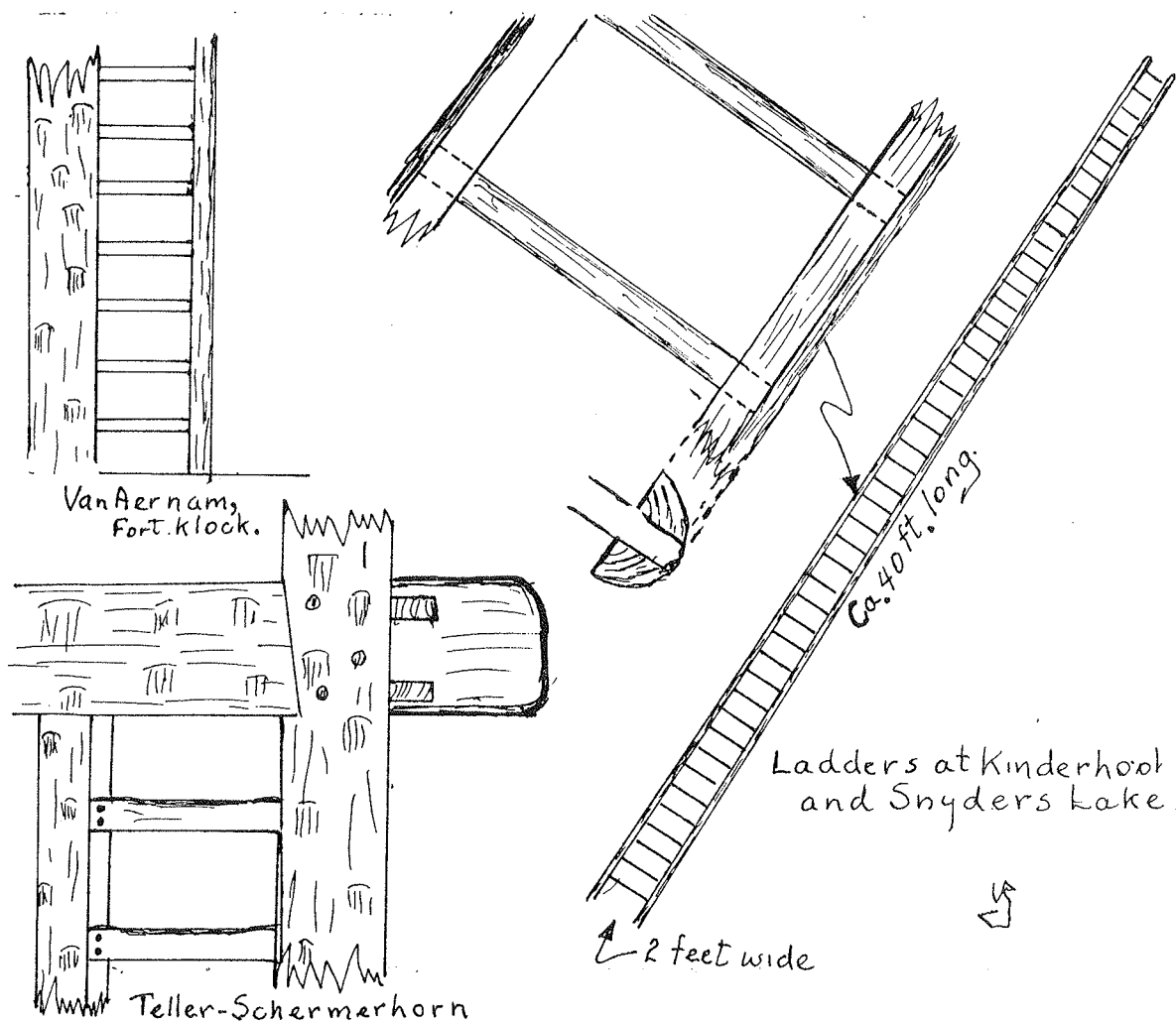
In most Dutch Barns a built-in ladder is present to permit access to the region above the anchor beams.

In the Town of Guilderland which has some pre-Revolution barns nearly every one has such ladders. All of them are built using one of the vertical timbers as one side of the ladder the rungs being rounded. The other side is generally made of a smaller hewn timber which is located either parallel to the gable wall or where it is located on one of the anchor beam posts at an interior bent.

A few similar ladders have been found in the Mohawk Valley in post-Revolution barns so that this traditional feature is not entirely limited to a localized region.

In other barns such as the Teller-Schermerhorn Barn the built-in ladder is at the gable end with its flat rungs being recessed in the vertical timbers supporting the outer wall.

Several free standing ladders have been found of massive size. These were over forty feet long, two feet wide at the base but tapered. The side members were made of a split tree having the rounded portions on the outside. It is difficult to visualize how such a ladder could be moved or manipulated.



The Hay Retaining Supports above the Anchor Beams

A temporary upper level floor was devised for hay and grain storage. This consisted of loosely laid peeled poles which were laid on top of the anchor beams. They extended to the further edge of the beam and were spaced about a half foot apart to provide ventilation to the lower part of the hay or the grain shocks and space for another set of similar poles spread across the beams of the adjoining bay.

When the crop was being stored some of the poles spanning the central area above the threshing floor were temporarily removed so that the hay or grain stalks from the loaded wagon could be pitched up for storage.

Frequently the timbers supporting the gable end pendants were made long enough to extend across the width of the first bay to be anchored in mortises cut into the side of the adjacent anchor beam. In these barns the poles supporting the hay were spread parallel to the gable end wall. In most instances these poles were made of straight trees from the forest though, occasionally, hewn timbers are to be found. There are sometimes remnants of some earlier structure such as a hay barrack roof or poles.

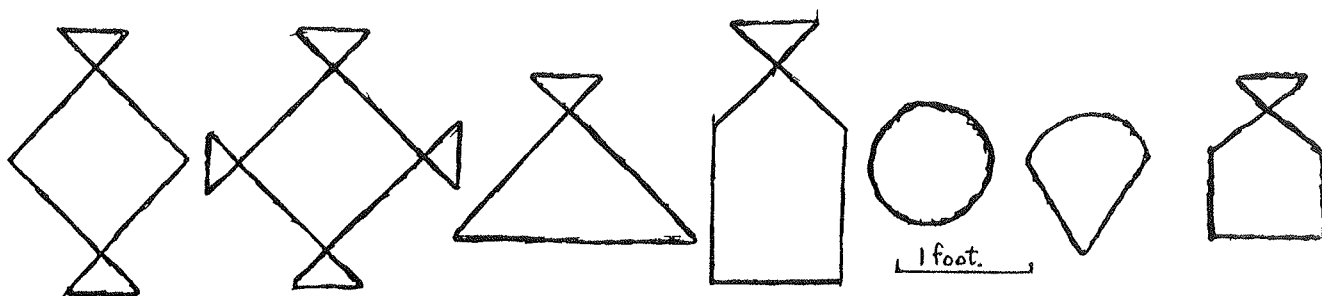
The Martin Holes

One of the most distinctive features of the early Dutch Barns of our region were the Martin Holes. These served a double purpose - ventilation and access of the barns' interior for the martins, swallows and other insect and seed eating birds. The shocks of grain and the hay stored above the anchor beams provided a rich source of food for such birds throughout the year.

The holes were large enough to permit the birds to zoom through them without perching and it was a joy to watch their flight patterns. Frequently, there were three to seven of these holes and they always were cut into the wide boards at the gable ends.

The holes which served as effective ventilators were supplemented by the upper part of the double Dutch type wagon doors which were often left open.

At least seven shapes have been observed in the shape of the Martin Holes. Most of them were made as square or rectangular holes but almost invariably they had a secondary hole as shown in the sketches disclosing the artistic sense of the builders.



Conclusions

There are a series of major developments occurring at the present time which have a direct and serious relationship to the future welfare of the Dutch Barns of the Northeast.

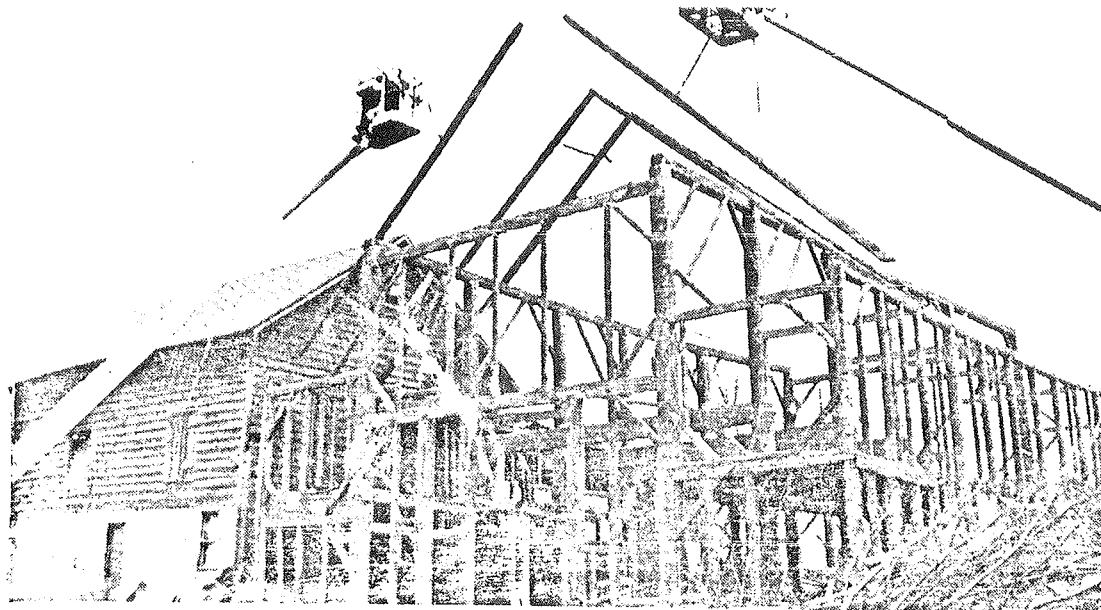
The present economy of the farm establishments in New York State is in a serious decline. The major farm activity in the Hudson, Mohawk and Schoharie Valleys for the past several generations has been dairying. The plight of the small dairy farm has been so enmeshed in government rules and regulations that its future is in grave jeopardy. The Dutch Barn is not readily adaptable to the installation of stanchions and the many sanitary facilities required by health department regulations have tended to force the modern farmer to construct structures to cope with these new rules. Hay no longer is stored exclusively in barns but to an increasing degree is put into giant rolls which are so large that they are not adaptable to barn storage but are left separately or in collective assemblies in the field with marginal or no protection from the weather.

There is another disturbing factor, probably more important than the lack of adaptability of Dutch Barns to the farms needs and that relates to the encroachment in the northeastern New York countryside of the development of "second homes" in the form of apartments, condominiums and town houses and urban sprawl. Dutch Barns are also adaptable by their modification into business structures and unique homes. Some of them are being acquired, dismantled and reconstructed closer to New York City. When this happens, most of the basic structure of the original Dutch Barn is lost even though in some instances the ancient timbers combine to make a beautiful home.

At the present time (the early part of 1990), there are a total of 6 Dutch Barns which have been preserved through action of local historical and preservation societies but all have been reconstructed after being removed from their original locations. A few farm owners having a deep interest in preserving a link to the culture of the early Dutch settlers who preceded them have protected the barns in their original state. Five others have been dismantled and are scheduled to be reerected at sites that should preserve them into the future for posterity.

The fate of the hundred or so which still remain is very uncertain. With the rapid change which is occurring in the ownership of such barns and the economic stress existing on land values, it is likely that all of those not in active use on working farms will soon disappear either through accelerating neglect, arson or the acquisition by individuals having an active interest in using the massive timbers in the construction of expensive "show place" structures.

It is of the utmost importance that those remaining on their original sites be measured and studied in detail since once they are gone there will be little left to remind posterity of the vital importance these structures once played in the economic and cultural development of the region. The Dutch Barn Preservation Society has an important role to play in this activity and will be involved in achieving the goals of answering the many questions still existing related to these noble structures.



Altamont Enterprise — Jim Gardner

Working carefully, the last rafters are removed from this Stitts Road Dutch barn. The building is being moved to Route 20.

Dutch barns to be restored

By Chris Sanford

GUILDERLAND — Parts of three Dutch barns will be restored and adapted to provide new office space for a local engineering firm in town.

Besha Associates Engineering Corporation is relocating its offices from New Karner Road to the Van Patten farm site on Western Avenue.

The existing structure will be restored and with two other barns, one from a Stitt Road site and the other from a Berne location, will be re-erected and adapted to accommodate the office space.

The barns were built around the turn of the 19th century, according to Jim Besha. "We're trying to preserve them so they'll be here in another 200 years," he said.

Mark Hesler, a trustee and founding member of the Dutch Barn Preservation Society, has some reservations about the project.

"We are opposed to moving the barns off of their original site, because they lose their historic value when you take them off site," said Hesler.

"We semi-support the plan, but with certain qualifications and other alternatives," he added.

In a position paper sent to Besha and the Town Board the society proposed leaving the Van Patten farm in tact at its original site in its original form.

The barn is the only Dutch Barn in Guilderland on the National Historical Register, though that doesn't exempt it from sale for commercial use.

Hesler does acknowledge, however, that it is better to have barns that are in danger of complete ruin and loss be restored and adapted for other use than to be lost completely as is the case with the Stitt road barn.

"The Stitt Road barn was in danger. No question that there is some merit to Besha moving it," he added.

The barn type, known as New World Dutch, is unique to the Hudson Valley, eastern region of the Mohawk Valley and Schoharie County.

"They are a representation of our Dutch heritage, and are the truest example of American agricultural architecture," said Hesler.

Besha said, "By making them into something that has value, we can ensure that they'll be used in the future."

The new world structures are adaptations of those built by the Dutch before crossing the Atlantic and are characterized by 60 foot pieces of timber from virgin forests and steeply pitched roofs that lend a cathedral like look to the inside of the barn.

The structures are very utilitarian, and, though they have no superfluous details the craftsmanship is beautiful. They are elegant in their simplicity

and usefulness, said Besha.

There are approximately 300 to 400 Dutch Barns left in the U.S., 25 to 30 of them are in Guilderland which is the highest concentration of Dutch barns in the country.

Hesler is trying to guard against a trend of perfectly good barns being relocated and adapted for use other than what they were intended for.

Shirley Dunn, past president of the Dutch Barn Preservation Society said, "We'd be more willing to accept moving a barn and using it as a barn somewhere else as the old farmers used to do. They are not Dutch barns any longer when you adapt them for other use."

Hesler concedes that the barns are not readily adaptable for today's commercial dairy farms, though they have been adapted for such use. He said that they are good for live stock and storage of farm equipment and hay.

The restoration work will be done by specialized craftsmen during the winter months and the actual rebuilding will start around next April.

Besha Associates Engineering Corporation specializes in designing water supplies and hydro-electric plants for municipalities around the country.

"We are an innovative firm, and we feel our engineering of-fice should be reflective of that," said Besha.

from Altamont
Enterprise 12/4/89

During the week of Jan. 8-13 1990, the Bratt-Mebie (Bradt-Mabie) Dutch Barn near the Mabie House (1670) in Rotterdam Junction, up the Mohawk River from Schenectady was dismantled. It was purchased from Gilbert Benirowski by Basha Associates of Colonie and is scheduled to be converted along with several other Dutch Barns. into their corporate head quarters. These will be located on the shore of the Watervliet Reservoir along Route 20 in the Town of Guilderland near Fuller's Station.

The barn was taken down by Don Carpentier and Mike Kelley. Historical records suggest that this barn may have been erected 1710-1712 when Arent Bradt married ^{Catrina} the eldest daughter of Jan Pieterse Mebie. (Mabie). They had 9 children, 4 boys & 5 girls. All of them were born at the Third Flat where their first home was located. In 1735 Arent moved his wife and family to a new brick house which he built, on Hindmost Farm No. 1, the western most of the farms on the Great Flats close to Schenectady. This house on Schermerhorn Road is still standing. Bratt-Mebie Dutch Barn. Ca 1937

V. J. SCHAEFER

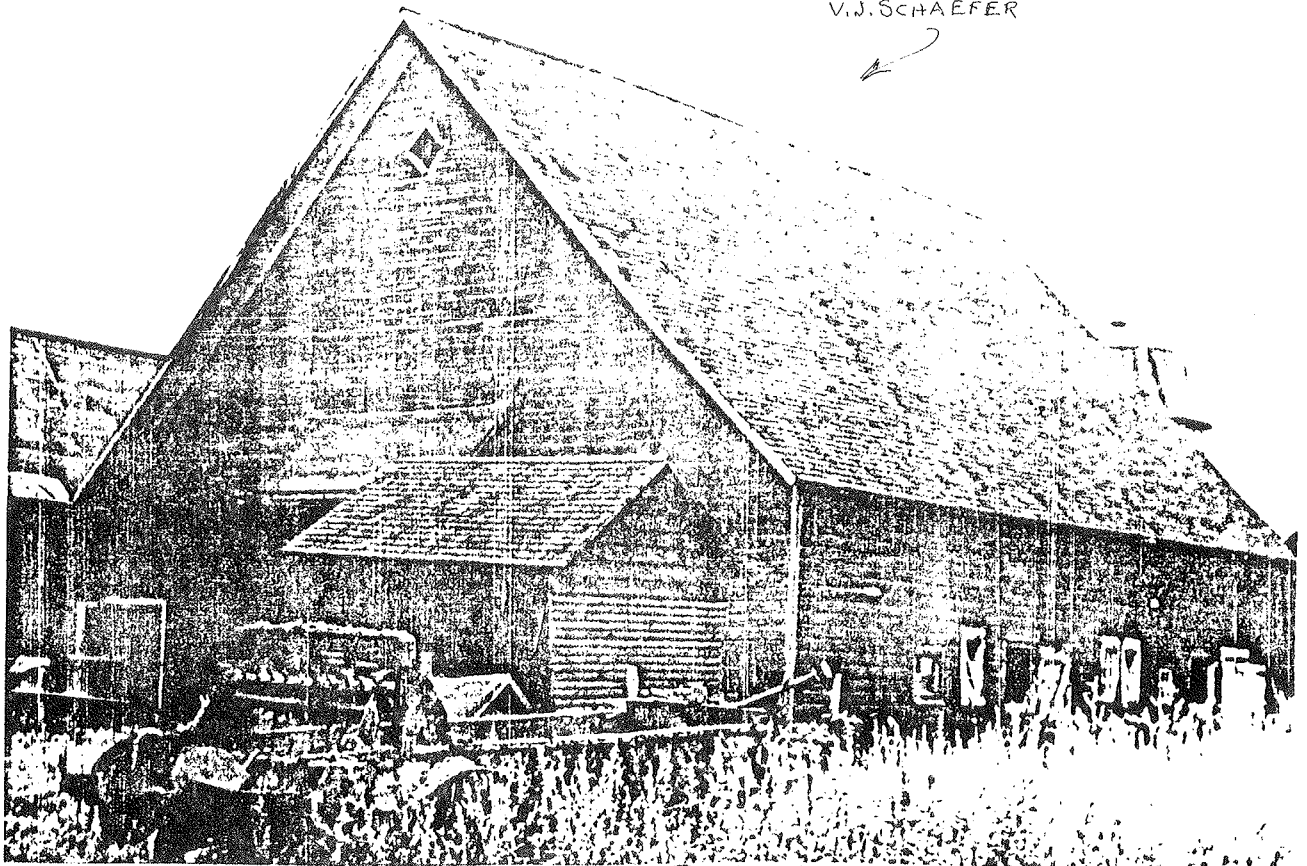


Photo by V. J. Schaefer

The Bratt (Bradt) Genealogy related to The Bratt/Mebie Dutch Barn

1. Arent Andries Bratt b. d. 1662 m. Catalyntje de Vos.
- | | | |
|---------------|------|--|
| Ch. Jefie | 1649 | m. Claas Van Petten |
| Ariaantje | 1651 | m. Ryer Schermerhorn |
| Andries | 1653 | m. Ariaantje Wemple / 2. Elisabeth Wemple. |
| Cornelra | 1655 | m. Jan Pootman |
| <u>Samuel</u> | 1659 | m. Susanna Van Slyck |
| Dirk | 1661 | m. Maritje Van Eps. |

- 2. Samuel Arentse Bratt b. 1659 d. 1713/14 m. Susanna Van Slyck

- | | | |
|------------|------|---------------------------|
| Ch. Arent | 1684 | m. Catharina Mebie |
| Margareta | 1686 | m. Daniel Toll |
| Anna | 1692 | |
| Jacobus | 1695 | m. Margarita Clute |
| Cornelra | 1696 | |
| Johannes | 1699 | |
| Catalyntje | 1701 | m. Jacobus Van Slyck |
| Susanna | 1704 | m. Bartholomeus Vrooman |
| Andreas | 1705 | m. Anna de Graaf |
| Samuel | 1707 | m. Catharina Van Petten |
| Ephriam | 1712 | m. Claantje Bosie (Viele) |

- 3. Arent Samuelse Bratt b. 1684 d. 17.. m. Catharina Mebie 1710

- | | | |
|------------|----------|---------------------------|
| Ch. Samuel | ca. 1715 | m. Catharina Van Guysling |
| Johannes | 1717 | m. Anna Van Antwerpen |
| Susanna | 1719 | m. Jacques Peek |
| Annatje | 1721 | m. Johannes Veeder |
| Margret | 1723 | m. Cornelis Vrooman |
| Eva | 1726 | |
| Abram | 1727 | m. Sarah Van Petten |
| Jacobus | 1730 | m. Elisabeth Dellamont. |
| Engeltje | 1733 | m. Daniel Campbell. |

Dimensions of The Bratt-Mebie Dutch Barn of Rotterdam Junction

The following measurements have been culled from the Long Form used by the Dutch Barn Preservation Society as developed by Mark Hesler.

Barn measured by Mark Hesler and Vincent Schaefer.

Date of Measurement Sept. 27, 1987.

Owner (present) Mr. Gilbert Benirowski.

Original settler - Arendt Bratt (Bradt) 1712

Schenectady County, Town of Rotterdam on Rte 5 S.

Orientation (roof line) - N.W. - S.E.

Length of Barn - 56 ft., 4 inches

Width of Barn - 47 ft., 5 inches

Height of roof peak - 36 ft.

Number of Bays - 4

Width of center aisle - 24 ft., 4 inches

Width of side aisles - 9 ft 3 inches

Length of Bays (from N.W. - 12' 10"; 13' 1"; 13' 2"; 12' 8".

Width of Wagon Doors - 9' 4" (from inside face of door posts)

Width of Side Animal Doors - 4 ft.

Height of side walls - 14 ft.

Distance between wall posts - 4 ft.

Width + Depth of Wall posts - 8" width 5 1/2" depth.

Distance from floor to lower surface of anchor beam - 11 ft.

Height of transverse strut - 6 ft 8 in.

There are no Wagon doors with wooden hinges

There are mortises for wooden hinges in the door posts

Both gable end wagon doors originally had wooden hinges.

Animal doors (one) was found with classic Dutch wrought iron hinges

Longitudinal struts - East side 5' 11" West side 5' 1".

There are no original exterior siding

There are no original pentices

There are original pentices mortises on both gable ends

There are original oak floor boards ave width - 12".

Distance between inner face of post and outer point of brace - 2 ft 11 1/2 in.

Distance between under surface of anchor beam to lower point of brace - 4 ft.

Depth of anchor beam - 22 1/2 in. Width of anchor beam - 11 1/2"

Dimensions of Bratt Mebie Barn (cont.)

- Length of anchor beam tongue beyond rear of post. - 11"
- Depth of column - 9½" Width of column - 11½ in.
- Thickness of anchor beam tongue - 2¾"
- Depth of anchor beam brace - 9½ in. Width of brace - 11 in.
- Length of anchor beam brace - 60 inches
- Distance between tongue and column edge 4", opposite side 4".
- Anchor beams have all chamfered edges.
- Anchor beam tongues (tenons) are all chamfered.
- Number of wedges - 2.
- Number of pins through column and anchor beams - 3.
- Anchor beam wood is Yellow pine. (pitch pine)
- Anchor beam post is Yellow pine (pitch pine)
- Anchor beam braces are Yellow pine (pitch pine)
- Column height from top face of anchor beam to top face of purlin plate - 9ft 4 in.
- One raising hole thru. column face above anchor beam .5ft above 1⅜" dia
- Neither purlin plate was spliced
- Sway brace (gable end) 4ft below gable end anchor beam.
- Sway brace (gable end) contact with purlin plate - 7' 6".
- Number of sway braces in 4 bays - 4.
- Included angle of roof - 86°.
- The roof boards were chamfered (double) and lapped.
- Roof rafters were toe nailed to wall plate.
- Distance between roof rafters - 4ft.
- Width of roof rafter 12" above wall plate 6 inches, d. 8 in.
- Depth of roof rafter 12" above purlin plate 6 inches, d. 7 in.
- Roof rafters were tapered as indicated.
- There was evidence of eaves trough supporting pegs.
- Distance of eaves trough peg below wall plate - 6" at gable end
- Distance of eaves trough peg below wall plate at other end - 20"
- There was a transverse tie at gable ends below purlin plate
- At time of measurement barn was unused except for junk storage.
- The barn is in fair condition with bad hole in roof at purlin plate.
- There were no martin holes
- Mohawk River is below bluff Ca 150 yards to east.
- Barn is on Third Flat s. of Mohawk, Jan Mebie (Mabie) House 150 yds S.S.E.
- Mabie House built by Daniel Janse Van Antwerpen Ca 1670. Still there.

Historical Items Related to the Bradt /Mabie Dutch Barn.

This barn located between the Upper and Lower village of Rotterdam Junction was built not far from the ancient Van Antwerp / Mabie stone house. These buildings were on the Third Flat along the south shore of the Mohawk River west of Schenectady.

The Third Flat includes much of the villages of Rotterdam Junction and extends from the river bend at the Schenectady Chemical Co. to Lock 9 and maybe beyond.

It was described by Pearson as 8 miles above Schenectady. This land was originally owned by Daniel Janse Van Antwerpen who was born in 1635 in Holland. He became an Indian trader and obtained The Third Flat in 1670, built a stone house (still standing) acquiring the land from the Mohawk Indians. This land was patented to him by Gov. Dongan in 1680. On January 22, 170 $\frac{5}{6}$ he sold half of this land amounting to 63 acres to Jan Pieterse Mebie.

Jan Mebie married Anna Pieterse Borsboom sometime in the early 1680s. He bought the Van Antwerpen stone house in 1706 having lived previously at the western end of the Flat. He died in 1725 and had seven children. The second child Catharina born in 1691 married Arent Samuelse Bratt about 1710. They had 9 children between 1715 and 1733 all born at the Third Flat.

It is quite possible that Catharina (Catrina) was given the barn and a house by her father Jan Mebie as a wedding gift. Thus it is likely the Bratt /Mebie Barn was built in 1710.

About 1735 Arent Samuelse Bratt built the Bratt House located on the western edge of Hindmost Farm No 1 the farthest arable land of the Great Flats about 2 $\frac{1}{2}$ miles upriver from Schenectady. This farmstead is adjacent to Hindmost Farm No 5 occupied by Johannes Teller and on which he built his house and barn in 1701 (The Teller / Schermerhorn Barn.) Bratt also built a barn next to his house. This had disappeared by the 1920s when I first traveled in this vicinity. Vincent J. Schaefer 9/30/87.

The Human Relationship to The Bratt/Mebie Dutch Barn.

Two brothers, named Bratt (Bradt) Albert Andriese and Arent Andriese were among the early settlers of Albany. They were referred to as de Noorman or de Sweedte, reflecting their origin in northern Europe.

Albert Andriese remained in Albany and had a mill along the Normanskill which stream was named after him. Arent Andriese went to the site of Schenectady with Van Curler as one of its original proprietors. In 1662 he died leaving his widow Catalyntje de Vos and 6 children. These were Jefie 15, Anaantje 13, Andries 11, Cornelia, 9, Samuel 5 and Dirk 3. Two years later in 1664 she married Barent Jans Van Ditmars. Van Ditmars was killed in the Schenectady Massacre of 1690. In 1691 Catalyntje married again this time to Claas Jans Van Boekhoven. Mrs. Bratt/Van Ditmar/Van Boekhoven survived her third husband and died in 1712. In her will of 1698 she specified that Hindmost Farm No. 1 was to be given to her second son Samuel.

Samuel Arentse Bratt, this second son of Arent Andriese Bratt and Catalyntje de Vos was born in 1659. He married Susanna Van Slyck, fathered 5 sons and died in 1712. Hindmost Farm No. 1 which had been willed to him by his mother Catalyntje is described as "a lot on the south side of the River (Mohawk) now occupied by Samuel Bratt containing 30 acres bounded on the east by land of Arent Bratt and land of Johannes Teller (Hindmost Farm No. 5), north by the river, west by woodland of said Arent Bratt and woodland of Samuel Bratt and south by the Commons. This Hindmost Farm No. 1 was willed by Samuel Bratt to his second son Arent of the Third Flat who built the brick house (still standing in 1988) in 1735-36. Their youngest child was 2 years old when the Bratt family moved to the new brick house nearer Schenectady. It was called The Homestead and was occupied by Bratt descendants until the death of Eva Bratt in 1839. Data gleaned from J. Pearson's Schenectady Patent.

[Additional information on hay barracks not published in Dutch
Barn Preservation Society Newsletter (Fall 1989 Vol.2 Issue 2)]

The Dutch Hay Barrack: additional notes
Roderic H. Blackburn with Shirley Dunn

Netherlands Hay Barrack Structures

In the Netherlands today you can see a remarkable diversity of hay barracks: single poles barracks with small conical roofs, two pole barracks with hipped roofs, three pole with triangular roofs, four pole with square roofs, five pole, six pole, and even seven, eight and nine poles with roofs to match in shape. Most are relative modern, often made with reinforced concrete poles with a pulley at the top advancing a steel cable from the roof plate to a hand winch attached to the pole two feet above ground. The Dutch find them as useful today for bales or loose hay as they did centuries ago.

There are probably as many four post barracks as all other sizes combined. Judging from 16th-18th century illustrations the four post barrack was almost exclusively the type used then. They are open with thatched roofs. An exception is a variation found in the province of North Holland: large structures with fixed pantile-covered roofs and enclosed sides, the latter of tiles or boards. But the function is the same, storage of hay or grain crops, or if empty they can give shelter to a farm vehicle (a Rembrandt 16 drawing also shows just this point).

The most detailed illustrations (of South Holland barracks) are provided by Van Berkhey (1811) (see previous article) who gives us the best picture of how roof plates and spars are made and joined and of a screw jack and a winding jack for raising the roof.

In the Hudson Valley house styles began to change from Dutch to English starting in the mid eighteenth century. Dutch barns, however, continued to be made into at least the second quarter the nineteenth century. Hay barracks, judging from surviving paintings likely were still being made after the mid part of the century.

Here are several European sources related to hay barracks from the 16th to the 19th centuries:

L. Brandt Buys in his monumental book on farm houses of North Holland (De landelijke bouwkunst in Hollands Noorderkwartier, Stichting Historisch Boederij-onderzoek, Arnhem, 1974) illustrates a number of early hay barracks from manuscript maps or plans and engravings. A Rembrandt etching ("De hut met de hooiberg" 1641) illustrates a 6 post hay barrack with a wagon under it next to a small house (p.398). A Gerard ter Borch de Oude drawing of a tall four post hay barrack in the early 17th century (p.396). A 1703 watercolor illustration of a farm at

Zeeburgh, near Amsterdam, shows a four post barrack. Curiously the thatch rood does not cover the roof plates but set inside them. Most of the photographs of hay barracks in the book date from the 1930s through the 1960s show a distinctive North Holland variation: the four post barrack is permanently built with a tile roof at the top of the posts and the entire sides enclosed with tiles, horizontal weather boards or vertical boards. This type is called a "hooihuis" or hay house.

J.J. Voskuil's Van vlechtwerk tot baksteen [From wattle and daub to bricks], Stichting Historisch Boerderij-onderzoek, Arnhem, 1979) describes the evolution and distribution of farm building types, especially structure and building materials, in the Netherlands since the 11th century when timber framing was first developed. A number of early hay barracks are illustrated in paintings dating to 1512, 1542, ca.1541-62, 1583, 1600, 1703, and 1708. All are four post barracks with thatched roofs. Most are too small to illustrate details but the barrack of ca. 1541-62 appears to have round poles while that of 1703 as square posts. In relation to the size of the houses they are adjacent, most appear to be about 18-20 foot in plan and 25-35 feet high.

Oude Boerderijen (Uitgeverij Ankh-Hermes B. V., Deventer, 1976) by Kees Post, Ger Dekkers ad A.A. C. Maaskant contains photographs of Dutch farms throughout the Netherlands. One barrack near Raalte in the province of Overijssel,, shows a conventional four post barrack. It has round posts with the spaced holes facing out the corner, not across the corner, or parallel to a plate as usually found.(p.97) A five post barrack in the province of Gelderland (p.120) appears to have holes perpendicular to the plate they face. Some of the thatch is missing exposing the skeleton of spars (spaced about every 15 inches) nad cross pieces (spaced about every 10 inches). The spars overhang the plate about a foot thus giving more protection to plate and hay.

S. J. Van Der Molen's Kijk op Boerderijen (Elsevier, Amsterdam/Brussels, 1979) illustrates the modern hay barrack. In this case the four round posts are of reinforced concrete. A pulley is mounted on top of each post and a wire cable runs though it to the roof plate and to a hand operated winch mounted on the post about two feet above the ground. The roof is thatched in size and proportions the barrack is no different from early ones. it conveniently holds hay bales (p.53). A modern two post barrack (p.84) has a square hipped roof of thatch. An older four post barrack has a low leanto structure built on three sides, convenient for housing animals who will be eating the hay. (p.108). This type of addition is not uncommon now or in the past in the Netherlands. In fact it is the basis for the large square

pyramid shaped North Holland house/barn which evolved from the barrack form. Another older barrack is in the rare form of a hipped rectangular roof on four posts (p.136).

Translation and paraphrase of description in J. le Francq van Berkhey Natuurlijke Historie van het rundvee Leiden 1811 Chapter VII:

"The technique involved in filling a hay barrack was no hit or miss operation. On the bottom was put a layer of old hay prevent hay from molding on the bottom and smelling. The hay was rolled around the fork and put around the outside perimeter, a fork-full at a time. Concentric circles of rolled hay were made until a layer was completed. When one layer was full and flat, then the next layer was added. One who did this well was called a "master at layering".

"After three or four weeks, the hay was pressed together if it had not compressed of its own weight. The hay breathes out a watery liquid and sometimes had a burning smell which was a sign that something was mouldering inside. This situation was not too bad and should not last longer than three or four days (The smell was much stronger if the hay was cut in hot, wet weather than in hot, dry weather). If the ferment should last too long, a long iron staff, the end of which was a cross with a hook, was shoved through to the middle to take a sample of the center. If the staff when it came out could have the end held in the bare hand without burning, there was no danger. If spit made the end of the staff sizzle, then the center was burning and the hay must be removed. This was caused by layering the hay in the barrack when too wet or having it stapled in the center too tightly. The outside layer should be tight and the center less so.

"After the first fermentation, the roof was lowered to adjust to the settling of the hay and a square of hay was cut out of the bottom for ventilation. After the hay had settled, the loose strands were pulled out and the sides combed with a "claw" to smooth them.

From the same source we have the dimensions of one illustrated barrack from the Province of Utrecht:

De nederlandsch Barrack, Utrecht Plate 7. 5 poles each 40' high, octagonal, 1.4' diam at base 11" diam at top. Posts are spaced ca. 14' apart. Max width is 23.25' giving H/D ratio of .58. Spars are 5 to a plate, 16.5' long for longest, they penetrate plate at 45 degrees. Plate is rectangular in section, each 18' long and overlap at ends, these are 16' center to center of overlap (no plates join each other by through tenon). The holes face outward, i.e., only one side of iron pole supports roof (?). 70.5" to first hole from ground.

Also from the same source, measurements on another barrack:

Van Berckey Afb. 9 p. 43 South Holland barrack engraving Fig. 2 shows 4 poles, squared, 20' high, 9' center to center on posts,

72" to first hole. There are 12 spars to a plate on the roof, the longest is 13' long. H/D ratio .45
 Fig. 3 is a five pole barrack with a H/D ratio of .63

17th Century New Netherland/ New York/ New Jersey Sources
 (primary data based on inventories, contracts, travel accounts, letters, etc.)

1638 inventory of a farm in Flatlands named Achtervelt mentions "1 hay rick, with five posts, 40 feet tall. (Reg. of Prov Sect 1638-42 I p.38.

1643 inventory of a farm known as Vredendael: "a barrack with four posts..1 jackscrew for the hay barrack" (Reg. of Prov Sect 1638-42 II p.134,136

Court Minutes 1648-52 pp75 & 82: in 1649 a hay barrack had been used for four years.

Court Minutes 1648-52 pp 179, 186 lists "The straw and the four beavers paid by the Patroon for covering the hay barrack".

Van Rensselaer Bowier Manuscripts:

p.192-3 Inventory of stock on farm No.3 island of Manhattan, January 1, 1632. The farm of Pieter Pietersz Bylvelt: "1 barrack with seed...containing 80 schepels of rye and wheat".

On the 1632 manuscript map of Rensselaerswyck appears the image of a hay barrack at a farm on the east side of the river.

P.752-775 11 farm leases dating between 1652-57, all but one mention a house, a barn and barracks, that is it was normal to include at least two barracks on each farm leased by the patroon at Rensselaerswyck.

On July 20, 1654 a farm west of the creek of castle Island, last leased to Jan Barentsz Wemp, now leased to Jean Labatie. The dwelling house was valued at 600 guilders, the barn at 1100 and three barracks, "exclusive of hardware, at 60 guilders". The house was covered with tiles. Annual lease payment was 300 guilders in addition to the tithes of "merchantable grain, wheat at 10 and oats at four guilders a mudde" [one muddle equal to 4 schepels, a schepel equal to .764 modern bushel].

NY Historical Manuscripts: Dutch Vol.III 1648-60, p.273. In 1651 some 3588 sheaves of barley are in the rick.

ER III (Notorial Papers) 1660-96, p. 346. In 1676 Claes Jansen is to build two square bay ricks (except the roofs). See also p.459, a four post rick at Claverack.

ER, Book I, 1656-75 p. 450. A farm at Schenectady is to have dwelling house, barn, three ricks (1668).

ER IV pp147, 177. Two Van Vechten wills transferring a farm on the east side of the river (present Route 9J below Rensselaer) use the phrase "house(s), barn(s), rick(s)" suggesting the integral nature of the ricks as arm structures. This phrase is written "houses, Barns, Berghs" in the will of Peter Winne, 1697, quoted in Munsell's Annals Vol. III 1852 p. 27.

ER III (Notorial Papers) 1660-96 p.85, a 1661 reference to a "schuyrberch", perhaps a hay barrack with the bottom closed in to make a stable/barn. This was just north of the Beverwyck line.

Romer's map of Schenectady, late 1690s show four pentagonal outlines, presumably hay barracks.

"...so that the aforesaid persons had in the year 1631 established two fine farms...provided with a convenient dwelling, the sides and gable built up with brick, long and wide as required; in addition two hay barracks, each of five poles fifty feet high.."

"...further a hay barrack of 4 poles, 50 feet above the ground..." Account of Kiliaen Van Rensselaer 7.30.1634 in A.J.F. van Laer, ed. Van Rensselaer- Bowier Manuscripts (Albany 1908) pp.308-9.

December 15, 1657 an ordinance was issued in New Amsterdam to the effect that "all Thatched roofs and wooden chimneys, Hay-ricks and Hay-stacks within this City" are to "be broken up and removed" within four months after publication.

I.N. Phelps Stokes The Iconography of Manhattan Island, 1498-1909. New York 1916 II, p.211.

New York Historical Manuscripts Dutch V.II
p.134-5 September 27, 1643 Inventory of the farm Vredendael (Manhattan?) owned by a Mr. La Montagne, leased to Bout Frances
The farmhouse, barn, a barrack of four posts, cook house and hog pen. [partial list of tools, implements]

1 wagon, near new; a foot plow with appurtenances, in working order; 1 ditto iron harrow; 1 three-pronged fork; 1 two-pronged fork; rope harness for two horses, in good condition; 1 fan; 1 peck measure bound with iron; 1 iron bound churn; 2 milk tubs; 1 butter tub; 1 new tub holding one half hogshead; 1 water pail; 1 oak chest; 3 good scythes with snaths; 3 Flemish scythes, good and bad; 2 handles; 3 pickaxes, one of English make; 1 hand cross cut saw; 1 iron wedge; 1 buttermilk tub; 1 half barrel with a brass faucet; 1 herring barrel; 4 ferrules for scythe blades; 4

ditto for Flemish scythes; 4 mattocks; 2 bill hooks; 2 new axes; 1 currycomb; 1 iron ladle to melt lead; 1 pewter tankard; 1 pewter mug; 1 large pewter basin; 1 ditto platter; copper kettle; 1 grindstone; 1 wheelbarrow; 1 25-rung ladder; 2 millstones, dressed and grooved; 1 jackscrew for the hay barrack; 1 auger; 1 carpenter's adze; 1 pruning knife; 1 hand saw; 1 trowel, 2 bits; 2 ferrules for a wooden maul; 1 gun; 1 iron bolt, 1 1/2 feet long.

18th Century New York/ New Jersey Sources

(Inventories, traveler accounts, manuscripts, and RHB comments on illustrations)

Jacob Rutsen Ulster County 22 September 1729 #219
 A Negro woman L45 [others L50,30,24,17]
 [farm equipment]
 6 hoggs L4.15.0
 [bedsteads with all: L10.8.0; L6; L3.10]
 1 barrack screw, iron stool & 2 ditto bolts L1.8.0
 a muskit L0.18.0

Anjou, ed. Ulster County II, p.167 Lists the 1769 estate inventory of Nicholkas de Meyer, brother-in-law of Marten and Gerrit Van Bergen, including

"Wheat in the Bareck sold to Benj. de Meyer...
 Rye do sold to Benj. de Meyer...
 Hay do Do...

RHB notes on measuring the Van Bergen barracks from the painting. If the barn is about 37' feet high (normal height), the 6 pole barrack with a floor is about 36' high. If so the spacing between poles is 16.7' height of floor is 14.5' (seems much too high if compared to height of people), height of plate of roof is 27.5'. The ratio of height to with is .5, quite a bit less than the usual .7, perhaps artist's error.

The second barrack, with no floor, has poles about 40' high. If so then posts are spaced 17.5' Roof plate is 25' high. H/D ratio is

"Barracks are a building I have not described to you, tho I noticed them at the first coming into the country. Tommy has made one for his Bro. [It has] four poles fixed in the ground at the distance of fifteen feet in a square. The poles are squared fifteen feet or more at the top and five feet at bottom unsquared. This is all above ground. In the square part of the poles there are holes bored thro at the distance of twelve inches big enough for a strong iron pin to put thro to support four wall plates which are tennanted at the ends, then some light spares are put upon the wall plates and thatched upon them. When it was only five feet above the ground, the roof can be raised at pleasure 21 feet or any distance from

the ground between that and five feet. These are to put hay or any kind of grain under and the roof is always ready to shelter it from hasty rains which is common here in summer. Those that have only two cows have the bottom part boarded at the sides and a floor laid over and the hay at top and the cost stable under." Mrs. Mary Capner (November 13, 1787) quoted in Herbert G. Schmidt, Rural Hunterdon: An Agricultural History. Rutgers University Press, New Brunswick. 1945 p.95 dc

"When the people wanted any hay, they cut some of it loose, by a specially made cutter. However, many people, especially in the environs of Philadelphia [and in New York and New Jersey], had haystacks with roofs which could be moved up and down. Near the surface of the ground were some poles laid, on which the hay was put, that the air might pass freely through it. I have mentioned before that the cattle had no stables in winter or summer and were obliged to graze in the open air during the whole year. However, in Philadelphia, and in a few other places, I saw that those people who made use of the latter kind of haystacks, viz. that with movable roofs, commonly had built them so that the hay was put a fathom or two above the ground, on a floor of boards, under which the cattle could stand in winter when the weather was very bad. Under this floor were partitions of boards on all the sides, which however stood far enough from each other to afford the air a free passage.

Peter Kalm, 1749-50, Travels, p. 264.

"hay-stacks with roofs which could be moved up and down" Kalm V.I p. 393

[Kalm notes that in NJ he saw barracks in the Swedish manner in the shape of a thick and short cone without any cover on it; while around Philadelphia they the type with adjustable roofs.]

"I have seen that those people who made use of the latter kind of hay-stacks, viz. that with moveable roofs, commonly had built them so, that the hay was put a fathom of two above the ground, on a floor of boards, under which the cattle could stand in winter, when the weather was very bad. Under this floor of boards were partitions of boards on all the sides, which however stood far enough from each other to afford the air of a free passage."

Peter Kalm, Travels p.393.

"...many farmers have several barracks in their barn-years where they put their superfluous hay and straw".

Str. John de Crevecoeur, Sketches of Eighteenth Century America, More "letters from an American Farmer:. New Haven 1925 p.142.

Diary of Alexander Coventry

Alexander Coventry 1788 in his diary describes building a barrack. including cutting 6 trees for the barrack, 28 pine trees for the spars, cutting hoops for the top of the barrack, tying on the lathes and laying about two rounds of thatch, difficulty in raising roof without iron pins, then borrow a barrack lever.

Verplank Family Papers , Westchester Co. New-York Historical Society mss. II 40-41. describes how to thatch a barrack. Barley or rye straw is best for thatching, something wheat straw better than barley which is more wooly and spongying thus rain more likely to soak through. Grain should be left on, not flailed off as it would bruise the straw. Rather a course flax or hemp hatchet (hetchel) should be used. Stacking: hay not to be stacked wet or packed too tightly because it secretes a watery liquid because of its natural fermentation which might result in spontaneous combustion. so on after van Berkhey. Verplank treatises recommends that in making a wheat or barley stack, the ears of the sheaves should be laid uppermost to keep the middle of the stack full, or else the rain will run into the ears and damage them.

Wacker (in Pioneer America 5 1973 pp.42,44) notes newspapers ads by 1730 show barracks being adopted by non-Dutch families. These occur in NJ, PA, NY, Md, Mass, Vir, Ohio and Prince Edward is.

The Frontiersmen of New York: by Jephtha R. Simms. Albany 1883. Simms was a chronicler of Mohawk Valley history, especially of the Revolution. He had interviewed residence who had first person experience of that period. Here is one episode and his comment:

"On arriving at the brick house, a halt was ordered. Mine host, hearing the warlike sound of the trumpet a little way off, fled to a barrack* of wheat on his premises, where he snugly ensconced himself beneath its sheaves; thinking that "The man who lives to run away, May live to fight another day". ...The premises of the tory where were then strictly searched for his person, even to the barrack in which he was concealed: and several troopers ran their swords down into the wheat sheaves beneath which he lay, without discovering him."

" *The word "barrack" is both German and Dutch. In the schoharie and Mohawk valleys, much hay and grain were formerly deposited in barracks -- indeed, such depositaries are used there at the present day. They are commonly made by erecting four upright posts, so as to form a square, firmly set in the ground, or held at equal distances by timbers framed into them above the ground. The upper part of the posts is perforated with holes, and a roof, made of quadrangular form, terminating in a vertex, rests upon wood or iron pins thrust through those holes. The roof is usually constructed by framing two timbers, crossing at right angles, and secured by side pieces, into which are framed four upright poles, firmly secured at the apex above. The roof is sometimes boarded

and shingled, but usually thatched. When a barrack is to be filled, the roof is raised to the top of the corner posts, and the hay or grain in sheaf is stacked beneath it; and as the contents are removed the roof is let down. Some barracks have a floor, and are so constructed as to last many years. Soldiers' huts are, by the French, also called barracks."

Dutchess County Doorways.., Helen W. Reynolds. William Farquhar Payson, New York 1931. p.162

"Prospect Hill. That elegant farm..", situated in Oswego, in the town of Beekman, Dutchess County, NY, the home of Gilbert R. Livingston. is offered for sale on May 30, 1796. Among its features are: 500 acres, the mansion with wings, one a kitchen the other a carriage house with granary above, garden, orchards, "the barn is 50 feet by 40, one cow-house 90, another 44 feet, waggon, corn and smoke house, eight frame barracks set on runners, to move occasionally..."

19th century New York/ New Jersey Sources
(primarily prints, drawings, paintings)
See end of text for these illustrations and labels.

20th century New York / New Jersey Sources and extant barracks.
(observations of existing barracks or parts thereof)

"In the fields adjacent to some of the old Dutch barns one is interested to see a unique type of haystack, consisting of four or five heavy poles planted in the ground at equal intervals, and covered by a roof which can be raised or lowered according to the amount of hay...It is a remarkable illustration of the persistence of inheritance that the descendants of the Dutch should have clung to the adjustable roof haystack for three centuries even in localities where Dutch architecture and most have long since vanished" - Thomas Jefferson Wertenbaker The Foundation of American Civilization: the Middle Colonies. New York, 1938 p.64.

Surviving Hay barrack parts

1. Oliver Dutch barn in Ulster county. Reported to have two poles [plates?] reused in the barn wall.
Ulster County: Oliver/Erusard barn at North Marbletown Burying Ground. In the barn are two reused barrack poles ca 25-30 feet long.
2. Altamont Orchard Dutch barn. Parts of three hay barrack roof plates were incorporated into this barn: one in the right aisle as a joist at head height, one in the beginning wall of the left

aisle, and a third at the end wall of this aisle.

3. Fyfe House on Fredericks Road, Altamont. Kitchen wing ceiling joists are three hay barrack roof plates, somewhat shortened at both ends.

Measuring three barrack roof plates now ceiling joists in kitchen of the Edwin L. Roseblum house (Fyfe Farm) on Frederick Road, Altamont. Measured and photographed 2.11.89

1. These plates are square in section 7x7"

2. They have been shortened from original length which can be calculated by the remaining holes and their angles. Originally they were about 240 inches long (20'). Holes are 35 inches apart center to center, and estimate 14 inches on each end beyond center of last holes. [No correction: 21" shows between last hole and the wall, and ad ca 6" in the wall leaves 27" beyond the last hole, so total length would be 266" or about 24 feet.]

3. One edge is chamfered and in the chamfer are a series of holes at increasingly acute angles as one goes from the center hole which is at 90 degrees to the plate. There were originally 7 holes to a plate. The holes are 2" diam and 4.5" deep. They have cut spikes left in them which were used to hold the spars in the holes. This has not been indicated in other descriptions. Are they 19th c additions or was this a 19th c barrack?

4. The angle of each hole to the length of the plate establishes the convergence of the spars. and the angle of all holes to the surface of the plate establishes the angle of the roof line. These measurements were taken by eye with a steel tape. The reconstruction on paper gives a roof which had the longest (outer) spars being 205 inches long (including 4.5 inches in the hole), the center or shortest one 175 inches long. The angle to the surface of the plate was about 56 degrees above horizontal [but a plate can be set in two ways, so angle could also be 34 degrees above horizontal. This is correct when drawn out with spars 175 inches long, they intersect when set at ca. 35 degrees]. Most Netherland barrack roofs are 45 degrees at most, most flatter. One might note that on tile roofs in the Netherlands the angle is closer to 56 degrees, because tile requires a steeper pitch to keep driven rain from getting under it.

5. if we take a H/D ratio of .7 then this barrack (with plates 24' long and thus poles on center about 18') was ca 34 feet high. If we take a ratio of .5 then height was 48 feet.

4. Columbia County: Ghent barn now owned by Michael Shrom: a 20 foot hay barrack pole supporting joists under one side aisle.

Octagonal and tapering from 8 to 6 inches wide, holes every 12 1/8 inches. Was cut off at an angle by an axe. Shows long use.

This pole was examined and measured on January 29, 1989. It is presently 240 (20') inches long.

1. Top of the pole is rough, probably a result of exposure and

- rot. The first hole is 8" from the top suggestion the original top was 4 inches higher.
2. Pole is octagonal; but corners are not as wide as the sides. That is, it was originally squared and then chamfered with a hewing axe as the surfaces are all hack marked (not adzed which is a misconception. An adze is used to remove ax marks in preparation for planing).
 3. The pole is weather worn all over indicating that it was in use for some years. It is still in good condition, so it was cut down long before the end of its useful life.
 4. The pole appears to be made of oak.
 5. Holes are spaced 12 1/4 inches center to center and have some been worn somewhat to make them slightly oblong, another indication of several years use. Holes were probably originally 1 1/8 inch diameter.
 6. The present length is 240 inches or exactly 20 feet. The original length above the ground was probably another 24 inches on the bottom where it was cut off. This I judge by the angle of the ax cuts which, on replication by an average height person indicated cutting at 2 feet above the ground. This plus perhaps 4 inches more on the top gives a pole length above ground of about 24 1/3 feet. Add to this 3-5 feet underground.
 7. At present the first hole is 43 inches above the bottom of the pole. If we add the lost 24 inches the first hole would have been about 67 inches above the ground. This happens to be exactly the height of the standard Dutch fireplace mantel - high enough to avoid bumping one's head for an average man in the 18th century.
 8. There is a short trunnel sticking out of the pole not far from the top. It is not in one of the regular holes but at right angles and between two holes. Function? Perhaps it was a stop so that one did not jack the roof too far, or the wind would not pick the roof up. Guesses only.
 9. The pole is presently supporting later floor joists on the north aisle of a three bay Dutch barn. Other supports (all are wood pieces, some RR ties, no stones) also seem to be non-original indicating the barn may have been moved to this location in the 19th century or even later. Presumably the pole was insitu up until this barn was resupported. Thus the hay barrack may have been in use up until this century.
 10. The adjoining stone house is a simple two story structure set into the hill side so that there are entrances on both levels. On the upper level there used to be two exterior doors to two rooms. House dates from ca. 1760-90s. The barn is probably of the same age and perhaps the barrack was too.

5. Collapsed hay barrack in field on east side of Route 31 in town of Livingston, Columbia County, between Blue Stores and Linlithgo. Sketched, measured, described and photographed by Mike Bathrick and Shirley Dunn 6/11/82 before it fell down of old age.

On east side of County Route 31 between Blue Stores and Linlithgo. Only original parts are the four poles. Roof made of modern 2x4s, 2x6s, 2x8s. One pole appeared to be broken off and the other three cut down to this height.. Each pole is now ca. 16 feet high, about 7 inches diam. Ten holes drilled at 45 degrees to side of barrack., the first about 5 feet above ground., the next hole 4 feet above that and the remainder about 9 inches apart. Four 26 inch steel rods hold up the roof
 Drawing shows: 4 poles diameter near base: 6.25, 7, 7.25, 7 inches. Holes 1.5 inches. One pole 15'9", another shows 61" to first hole, 47" to next, and 8.75 to 9.5 inches between rest.. Spacing between poles center to center are: 17'9", 17'6", 17' 8", and 18'.

6. From Shirley Dunn:

1. A early 20th c photo taken at the Mattys Ten Eyck farm, Hurley showing it as converted to a gazebo with a thatched roof. 6 poles. This a photo in the Hoosler collection. This was Newkirk or Ten Eyck family.

Surviving hay barracks in New York and New Jersey

1. Existing hay barrack with four poles, thatched roof. It has railing (i.e. used as a gazebo). It is 14 feet square and 15 feet high, screened in. It is on Hasbrouck Lane near the Rotron Co., Woodstock. It was constructed by a Mr. Van Rijn, owner of the Roton Co. about 1947 when he founded the company. He came from Holland and has since returned there. The poles are used telephone poles. Not thatched. A Mr. Young owns the home it is on now. Peter Sinclair (914 338-0257) knows about it.

2. The recently surviving New Jersey examples were recorded by Don McTernan in 1978 and for the curious here is a brief guide to their locations: Oakes barrack on Central Avenue, Old Tappan, Bergen County; Pontecorvo barrack on Sunset Road, Pompton Plains, Morris County; Van Ness barracks (2) on Jacksonville Road, Towaco, Morris County; Wolfe barrack at intersection of Route 46 and Wolfe Road, Vasa Home, Morris County; Thomas barrack on Grand Avenue, Hackettstown, Warren County; Sanman barrack on Rockport Road, Hackettstown, Warren County; and Schlapfer barrack on Sandy Hill Road near intersection of Route 31, Raritan Township (near Flemington), Hunterdon County. [cut this para if necessary]

These New Jersey barracks are not large barracks in the sense of having five or more poles or being forty feet high. They are smaller four pole structures presumably reflecting the functional needs of latter day farms in that region. A comparison of

dimensions may be instructive:

3. Long Island Hay Barrack at Calverton, Suffolk County. It is located in Robert Cushman Murphy County Park, which was formerly a farm and this as a surviving structure of that farm. The four posts are about 14-15 feet high, set about 13 feet from each other, each c. 6x6 inches square, with holes spaced about one foot apart all the way to the ground. The pyramidal roof is covered with boards running up and down, each 3-4 inches wide and 1 inch thick. Half way up the four main rafters there are small crossing 2x2s to help support the boards. All the wood looks like 20th c manufacture. Plates are c 4 x 4 inches, a 2 x 6 crosses each corner thus snugly holding the main post to the plates. Plates lap each other at corner and hang out beyond about a foot. Steel pins hold them up. Roof is partially covered with rolled roofing. Condition is only fair and could fall down in next 1-5 years.

[Details from Dr. Saynell Stone, Dept. of Anthropology, SUNY Stony Brook, NY 11794] She states that SPLIA has offered to move it one of their historic sites.

4. Hay barrack now at Old Bethpage Village, Long Island. (additional data can be had from John Stevens, Old Bethpage Restoration, Round Swamp Road, Old Bethpage NY 11804). A relative small four pole barrack with spacing bars across the tops of the posts. Has raised floor with enclosed sides below the floor. Roof is shingled. Probably dates from earlier in this century.

Additional bibliographic sources which refer to hay barracks

-----, Home Contrivances for Farm and Garden, Dairy and Workshop, How to make over 1,000 handy appliances and labor saving devices needed on the farm or about the buildings. Orange Judd Company. Chicago, New York and Springfield Mass. 1899. p.129-132. Engravings of hay barracks: four post on stones, in ground, boarded and thatched roofs, and manner of raising with a lever and ladder. Advice on construction, working, dimensions.

-----, Cassell's Household Guide: Being a Complete Encyclopedia of Domestic and Social Economy...Vol.1. p.276-7. Cassell, Petter, and Galpin. London and New York n.d. (late 19th c.). Under section entitled Cottage Farming, housing hay. Engraving of 6 post barrack built on a brick stand, with round corrugated metal roof and weathervane. For cattle hay, short description of how it works. English barrack called "Dutch hay barn".

-----, The New York State Historical Association and its Museums: An Informal Guide. Cooperstown, 1968 p.72. Illustrates eighteenth century barrack.

-----, Home Contrivances for Farm and Garden, Dairy and Workshop, How to make over 1,000 handy appliances and labor saving devices needed on the farm or about the buildings. Orange Judd Company. Chicago, New York and Springfield Mass. 1899. p.129-132. Engravings of hay barracks: four post on stones, in ground, boarded and thatched roofs, and manner of raising with a lever and ladder. Advice on construction, working, dimensions.

'Afbeeldinge can de Stadt Amsterdam in Niew Nederlandt', the Costello Plan, shows one hay barrack outside the walls of New Amsterdam. An ordinance of 1657 required their removal from within the city.

-----, _____ in American Agriculturalist. July 1874 p.257. The manner of thatching with straw or bog hay.

Benson, I, 19th Century America, Paintings and Sculpture. Metropolitan Museum of Art, New York. 1970 pl. 53. Illustrates 19th century barrack.

Cummins, George W., History of Warren County, New Jersey. Lewis Historical Publishing Company, New York. 1911 p.66 photo of 4 post barrack.

Gibbons, Kristin Lunde. The Van Bergen Overmantel. MA Thesis,

Cooperstown Graduate Program, SUNY Oneonta. 1966

Pp. 44-54 discuss the two barracks illustrated in this ca. 1733 painting of the Van Bergen farm at Leeds, Greene County, NY. Two six pole barracks filled with hay (straw?), one with elevated floor. She quotes from several early NY sources.

Hills, Patricia, The Painter's America. Praeger, New York. 1974 p.7. Illustrates a 19th century barrack.

Noble, Allen G. Wood, Brick and Stone. University of Massachusetts Press. Amherst 1984. pp.109-110. Summary of literature about occurrences outside New York and Netherlands

Post, Keys, Ger Dekkers ad A.A. C. Maaskant, Oude Boerderijen (Uitgeverij Ankh-Hermes B. V., Deventer, 1976)

Schultz, Christian Jr. Esq. Travels on an Inland Voyage. New York 1810. Vol.1 Engraving of a "kalkberg", raised floor barrack, entitled "A View of the Boats and Manner of Navigation on the Mohawk River".

Stokes, I.N. Phelps, The Iconography of Manhattan Island, 1498-1909. New York 1916 II

Van Der Molen, S. J., Kijk op Boerderijen (Elsevier, Amsterdam/Brussels, 1979)

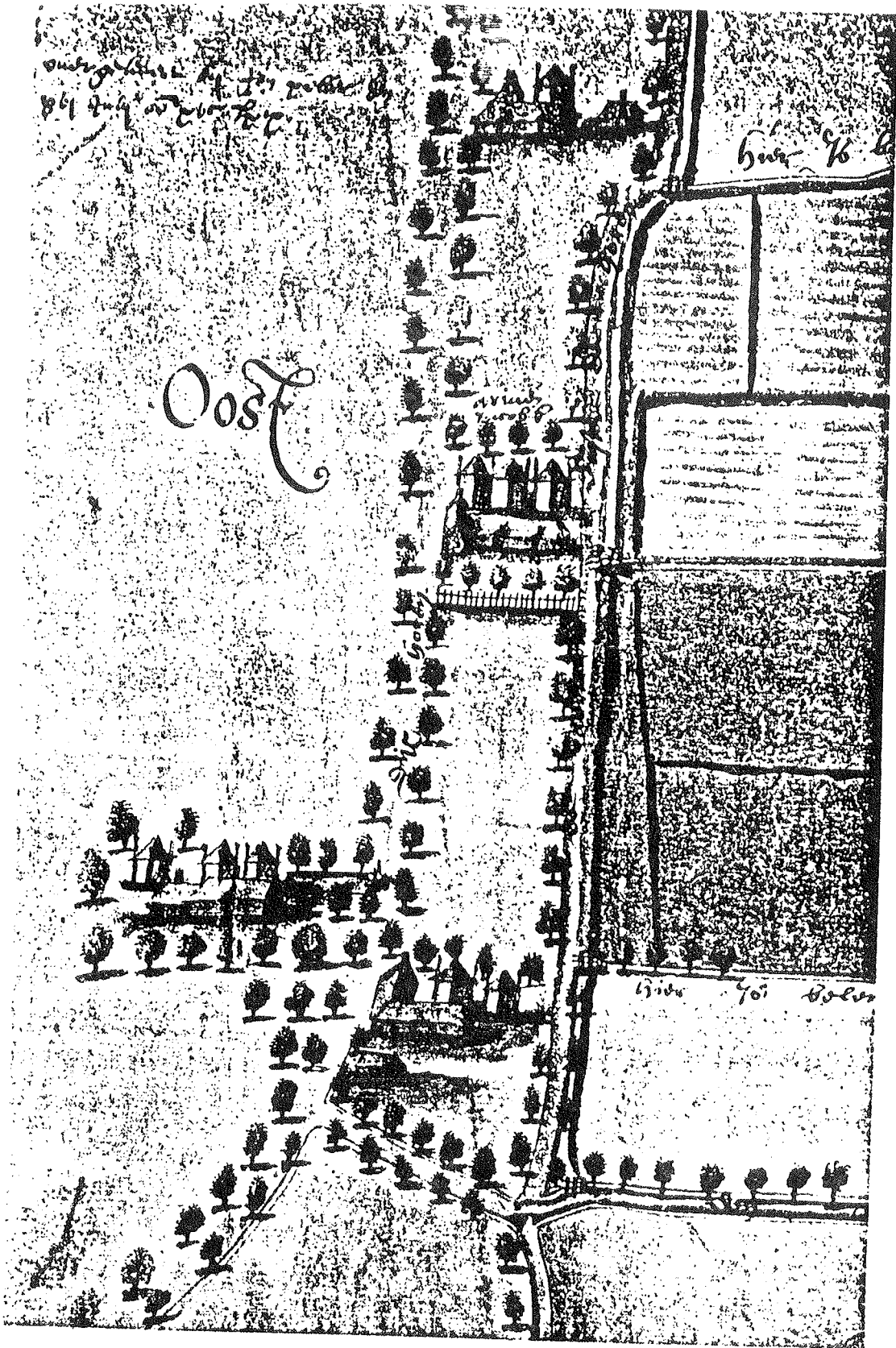
Voskuil, J.J., Van vlechtwerk tot baksteen, Stichting Historisch Boederij-onderzoek, Arnhem, 1979)

Wacker, Peter O., "Dutch material Culture in New Jersey" in Journal of Popular Culture date? p.948-957. Illustrates and maps distribution of Dutch houses, barns, dyke/banks and barracks in New Jersey, with attempted explanation for occurrences/ non occurrences in different counties. Sees barracks as widely adopted outside Dutch area. 1911 Photo of 4 pole barrack from Cummins (see).

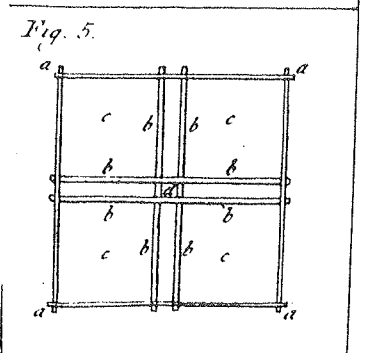
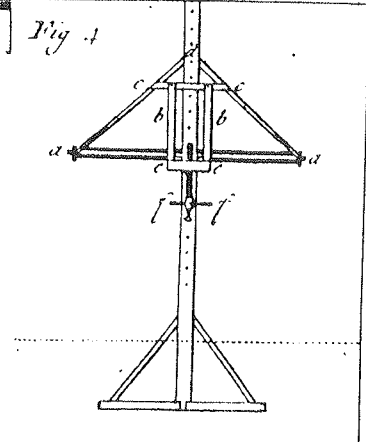
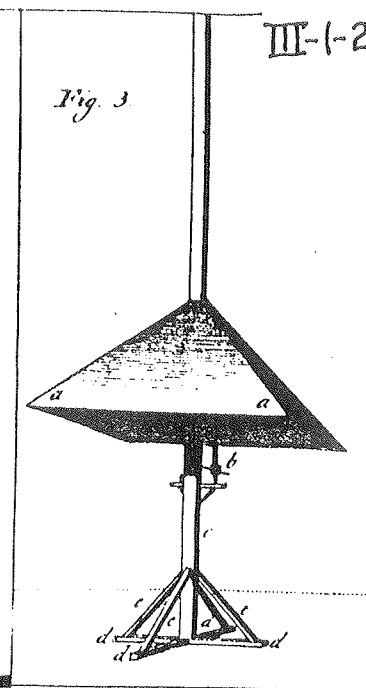
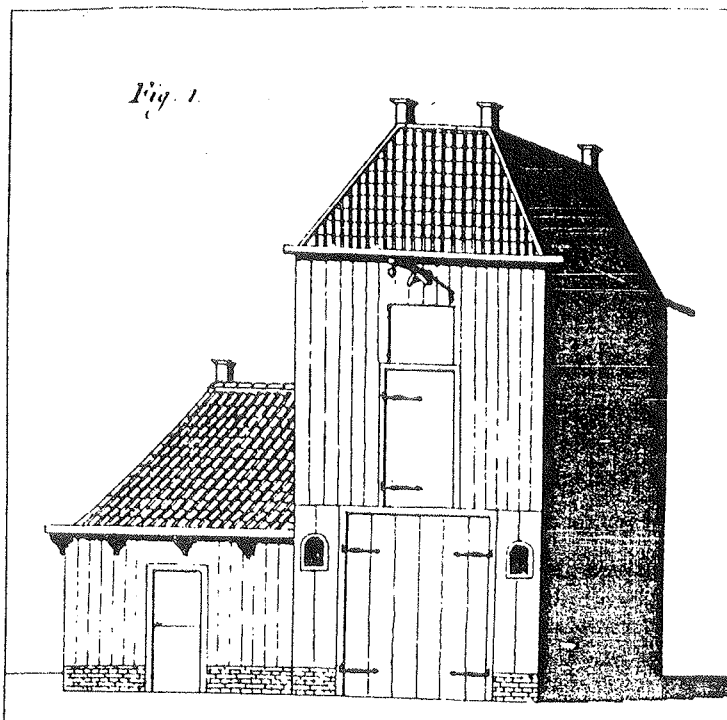
Wacker, Peter. O. "Folk Architecture as in Indicator of Cultural Areas and Cultural Diffusion: Dutch barns and Barracks in New Jersey" in Pioneer America, 5 (July 1973) pp.37-47. fuller description than that of above. Not examined.

Wacker, Peter O. Land and People: A Cultural Geography of Preindustrial New Jersey, Rutgers University press, New Brunswick, NJ. 1975. Not examined.

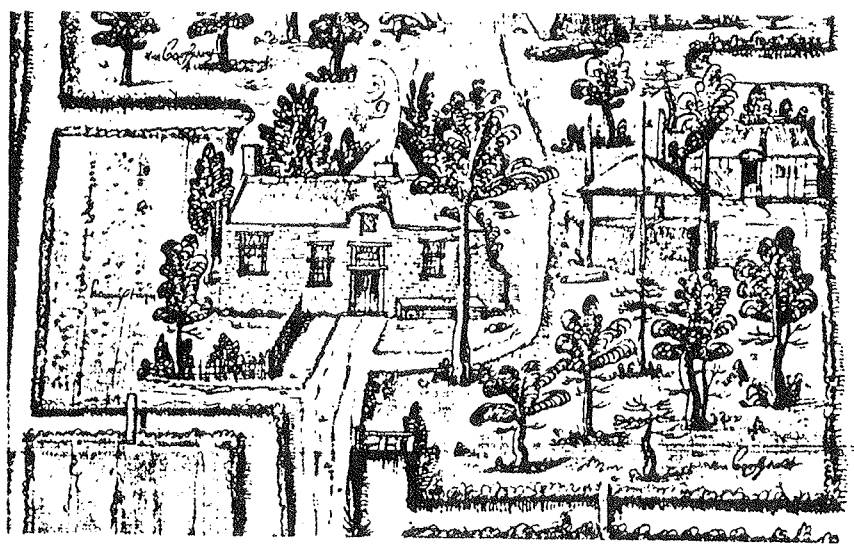
Woodward, Carl R., ed. Ploughs and Politics: Charles Read of N.J.; notes on agriculture. Porcupine Press, Philadelphia 1974 pp. 370,371. Illustrates 18th century barracks.



19. Farms in the vicinity of Delft c. 1569. Note farms have one, two or three hay barracks. (Voskuil 1979:82)

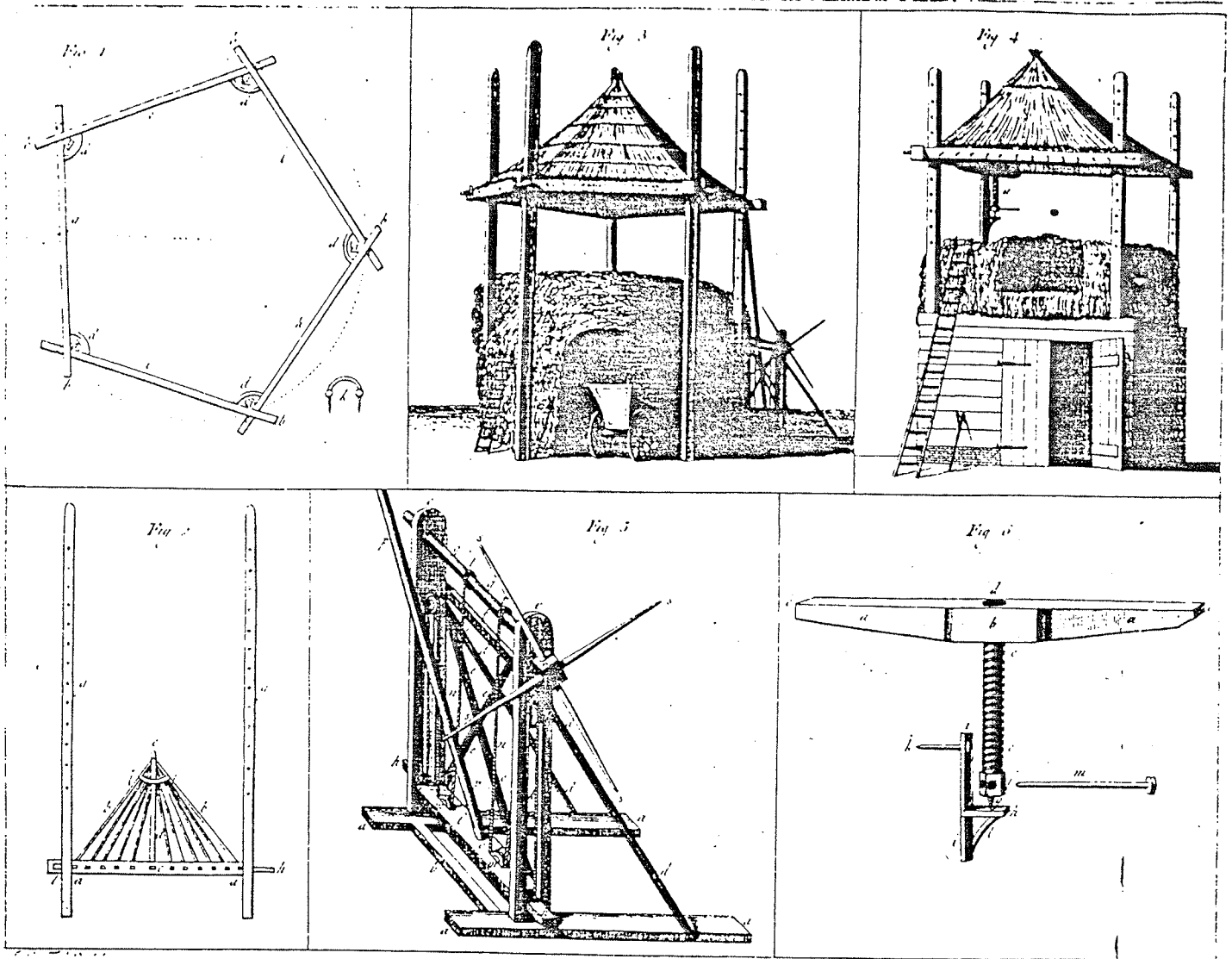


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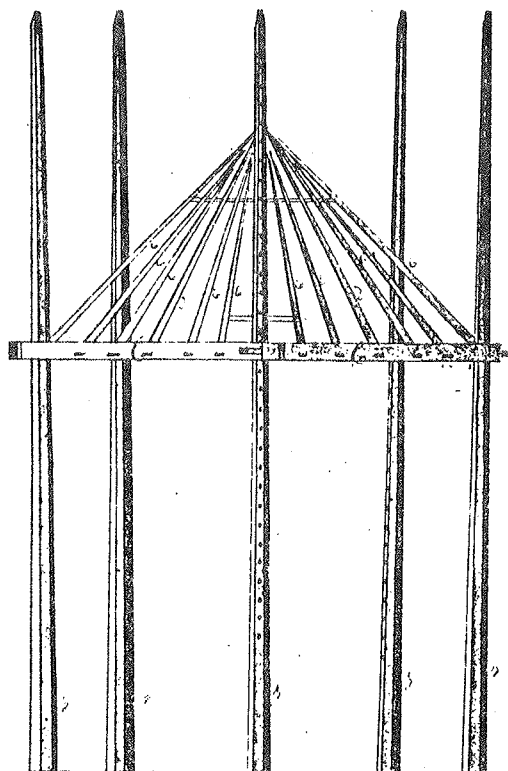
2. An enclosed hay barrack with tile roof in North Holland, c. 1811. Forming hay stacks. A single pole movable hay barrack showing structure and use of a screw jack. (van Berkhey 1811: Vol. 9 Part 1 Plate 5.

3. Netherlands farm of c. 1541-62 in the Steekt polder. With four post hay barrack with thatched roof, essentially identical in form to those built in New York through the 19th century. (Voskuil 1979:33).

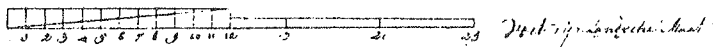
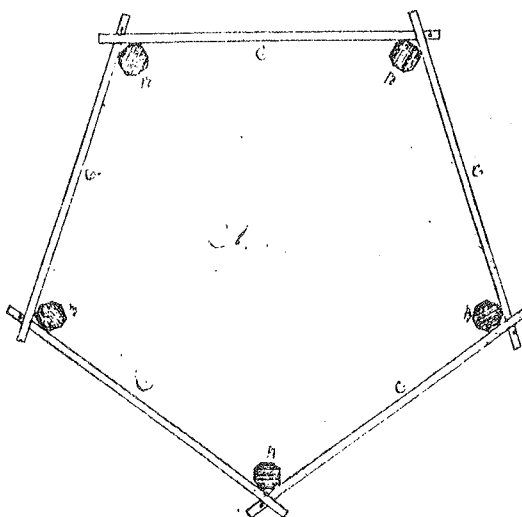


Afb. 9. Vijfroedenhooiberg, Zuid-Holland, naar Le Francq van Berkhey, 1811

4. Six engravings of a South HOLLAND hay barracks and parts c. 1811: Fig. 1) five-sided plan for the plates with iron cleats around each pole; 2) structure of a roof and two poles for same barrack; 3) same barrack with jack in place; 4) a four-sided barrack with enclosed lower portion; 5) a winding jack; and 6) a screw jack. (van Berkhey 1811: vol.9 part 1, plate 9.)

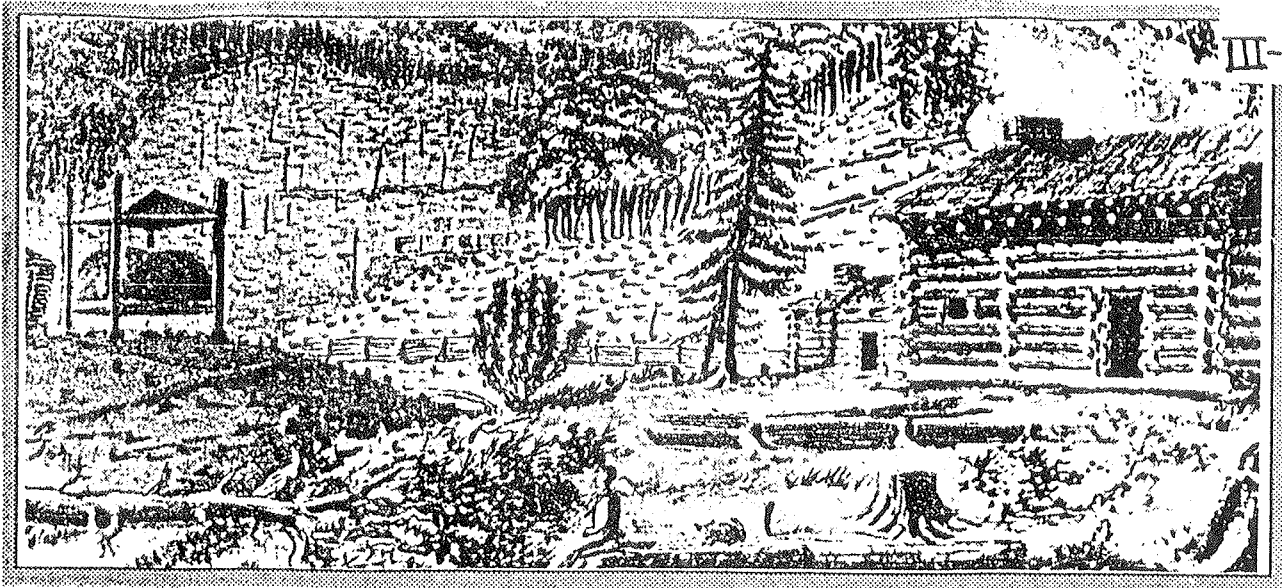


*It. Groot van de
B. R. R. R. R. R.
C. R. R. R. R.
D. R. R. R. R.
E. R. R. R. R.*

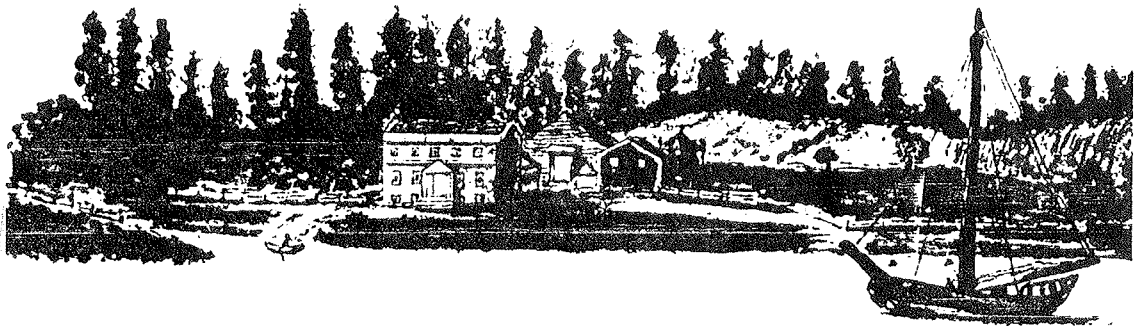


Pl. 7. Vijfroedige hooiberg, prov. Utrecht

5. A five-sided hay barrack from Utrecht province, c. 1811. Note the rare use of octagonal posts. The scale indicates that the posts are 42 feet above ground and are spaced about 14 feet from each other. (van Berkhey 1811: vol.9 part 1, plate 7.)



6. A small raised-floor hay barrack of c. 1800 in Schoharie County, New York. (reproduced in Catskill Country magazine, Winter/Spring 1988-89 p.25)



view of major renselaer's house near albany. 1807.

7. View of Major Van Rensselaer's House near Albany. 1807
By the Baroness Hyde de Neuville. Watercolor on paper
The New-York Historical Society. Major James Van Rensselaer (1746-1827) lived in Bethlehem on the Hudson River just south of Albany. The Federal style house has a small Dutch barn to its rear and a small four-post hay barrack to the right. The barrack is quite full so we may assume that the painting was done late in the summer.

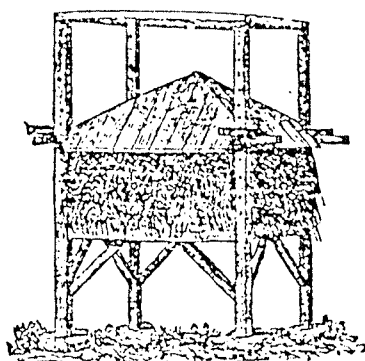


Fig. 155.—BARRACK WITH BOARD ROOF.

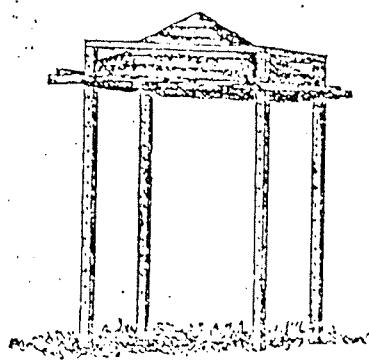


Fig. 156.
BARRACK WITH THATCHED ROOF.

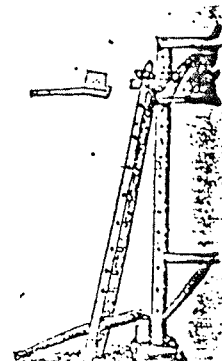
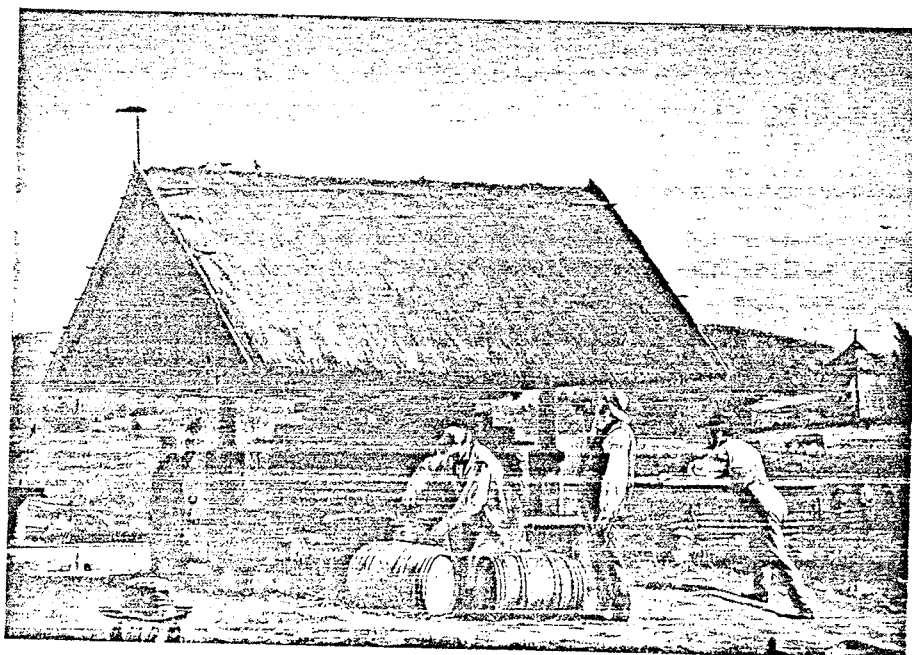
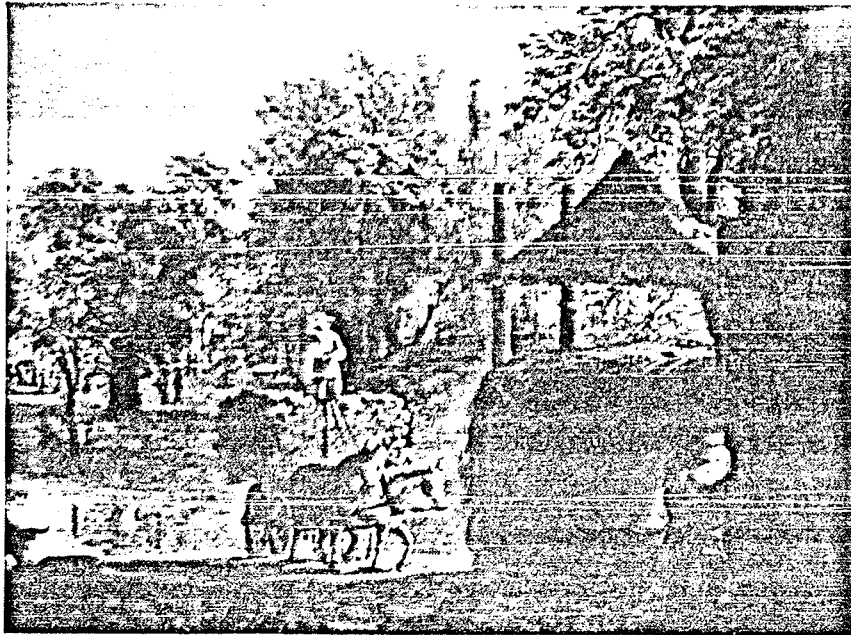


Fig. 157.
MANNER OF RAISING

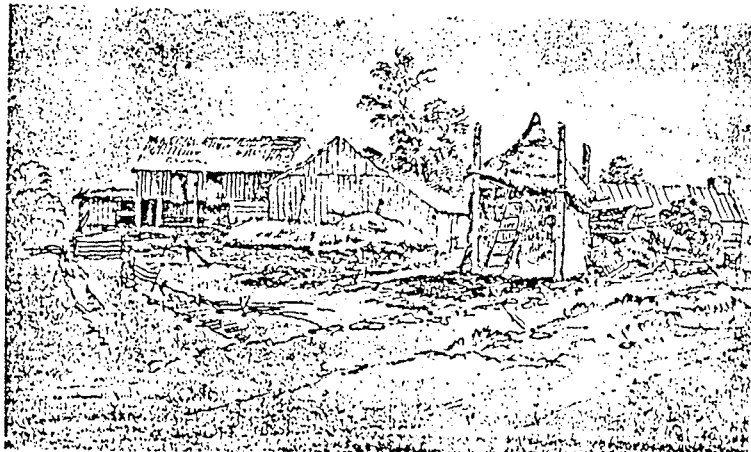
8. Two hay barracks c. 1899. Note both have top plates to insure spacing of the posts. One is braced so as to be free standing on stones. Figure 157 shows the manner of raising the roof: using a ladder pried up by a heavy stick fulcrum. Perhaps the simplest method since the spaced wrongs of the latter accomodate lifting the roof at any height. (Homemade Contrivances for Farm and Garden, Dairy and Workshop, Orange Judd Co. 1899).



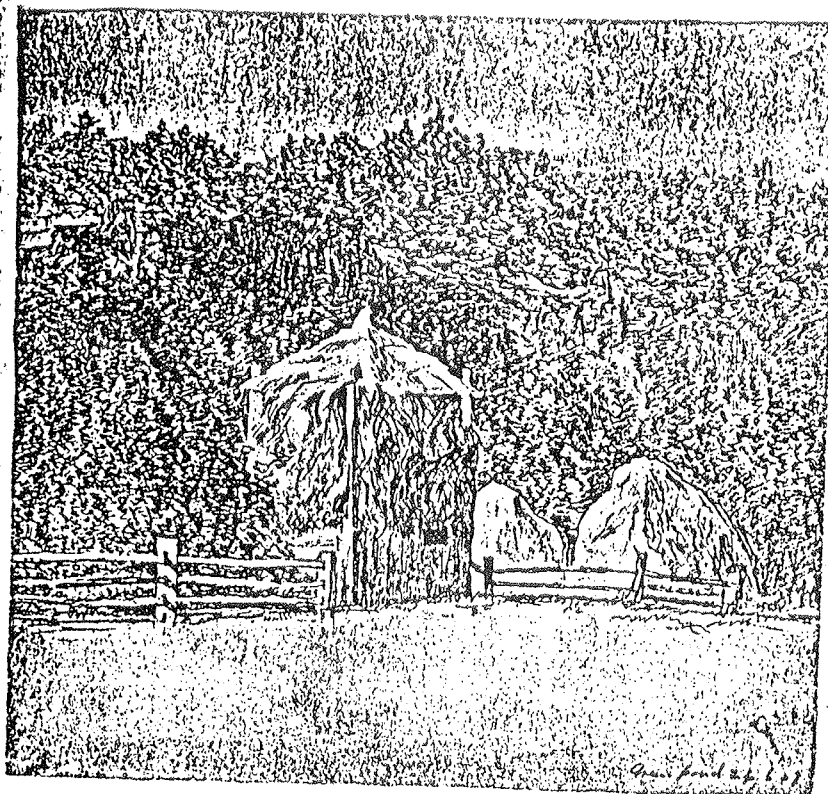
9. Detail from the painting Cider Making by William Sidney Mount (1807-68) (Metropolitan Museum of Art), 1841, eastern Long Island. The Cider mill itself is a form of two-pole hay barrack but with screw-tapered posts which can move the roof up and down. A preliminary sketch for this painting shows the roofing and gable siding to be horizontal boards (?), whereas the painting has a thatched roof and verticle gable siding. In the background is a four-post hay barrack, thatched with a latter resting against the roof. Appropriately for a late summer period the barrack is full.



10. Detail from the painting Haying by Asher brown Durand (1796-1886), 1838, possibly New York State. A typical four-post hay barrack with thatched roof.



11. Farm Scene, a scetch by Asher B. Durand (1796-1886), n.d., probably New York State. Essentially the same barrack as in the painting above (No.9). Note that one corner of the barrack roof is raised above the others.



12. Haystack, Green Pond, 1857 by Homer Dodge Martin (1836-1897). Probably New York State. It is dated September 6 1857, again for this period of the year the barrack is completely full with the roof closely covering the hay.

In addition to these 19th century pictures, there are several more painting and drawings, mostly from the mid to late 19th century, which have barracks in them. Interestingly, some are scenes which are in New England.



13. Spring Hay Work - Grafting, after a drawing by Winslow Homer (1836-1910), last quarter of the 19th century, probably New York. Note the long forked pole, likely for raising the roof which is of light construction with the plates made from poles. A small roofed pen for small domestic stock is attached to the barrack. The haystack formed around a single pole is at left.