

kept in the side-aisles facing the center-aisle (*deef*) and the family lived at one end with an open hearth. This developed to the still present historic form in the Netherlands where the animals and living space are connected in the same building, but separated by a wall against which a jambless hearth with smoke hood was built. It is a working farm house to which eventually a separate barn, brick kitchen, framed sheds and hay barracks might be added.

The living space in the early farmhouses we visited in The Netherlands have taller ceilings than our Hudson Valley descendants and their ceilings are lightly framed. The smoke hood for the jambless fireplace is supported internally with metal straps. In the New World, the massive hood-beam and trimmers that support the smoke hood are perhaps the result both of the separation of house and barn and the abundance of wood and lack of iron in the New World.



**Guelderland House Barn
with overhanging wolf-roof (*wolfdak*)**

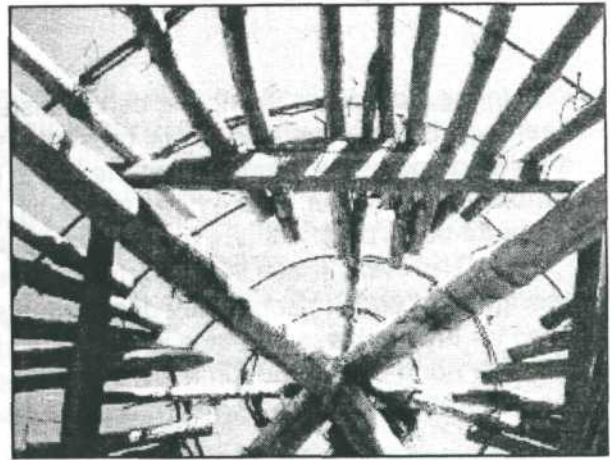
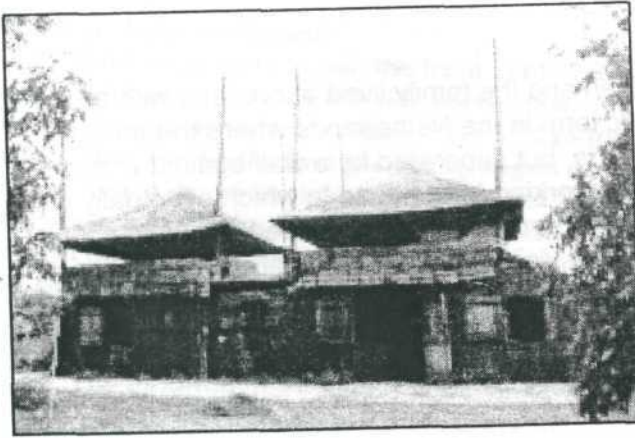


Of the houses and barns examined on our tour, all had anchorbeams (*ankerbalken*) except one that had dekbeams (*dekbalken*). One early barn had a Germanic front end overhang. This barn had raising holes at the bottom of the columns for lifting the bents onto the stone piers. These were the only use of raising holes we found. Many farm buildings have docked-gables (*wolfdaken*) and in some places in Guelderland this forms a large sheltered area at the entrance of the barn.

Farm houses and barns are normally thatched or tiled, often a combination of the two. The tiled slope below the thatch is to shelter the cows in the side aisle. The cattle generate too much moisture for thatch so tiles are used over the aisles. Small twisted bundles of straw were placed under and between the tiles to make the roof more weather proof.

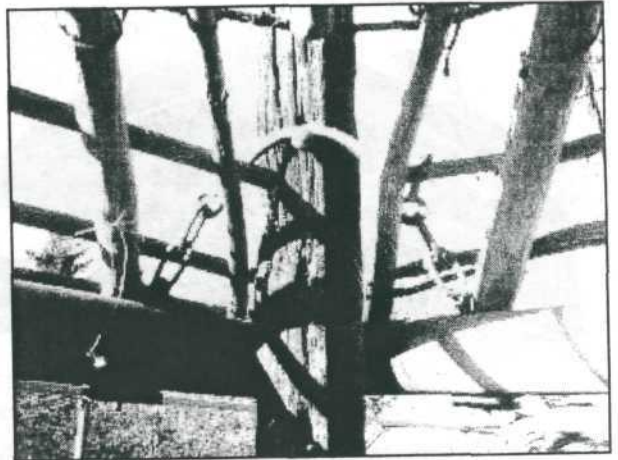
Markelo is in an area where the traditional thatched hay barrack is still part of many farmsteads. The most actively used, and most are not, are being replaced with 6-sided metal barracks. These have three poles of metal or cement and the roof is raised with winches, cables and pulleys. The use of the cable began in about 1920. Like the many American barns and silos that stand unused and deteriorating here, this same situation faces the hay barrack in Holland. There is also a deep sense of identity with the thatched barrack and we visited and saw a number of newly built and restored ones.

When we arrived, Wim met us at the airport and drove us about 125-kilometers east to Markelo. Along the way we saw many farms with many types of barracks. From one pole, the umbrella-barrack (*Paraplu*), to six pole barracks and all the numbers between. We visited two Old Saxonian farms in Blaricum, Wim's home village about 20-kilometers east of Amsterdam. The farm of Peter Storimans had the first barrack we visited. Peter maintains a diversified working farm. His barrack is thatched and he repairs it himself as needed. He demonstrated for us the modern tools and method for tying the reed down to the willow lath with wire.



de Werff Farm Shed-Barrack (*schuurberg*)
 Betuwe region, Province of Gelderland
 photographs from Wim Lamphan

We drove southwest, crossing the IJssel and Rhine rivers and into the Betuwe region of the Province of Gelderland and arrived at the farm "de Werff" at the origin of the river Zoel, at a place called Zoelmond. The type of double four-pole barrack with additions off three sides that we found there is known as a shed-barrack (*schuurberg*) and is found in the region south of the Rhine. I was familiar with this particular example from Wim's web site (<hooiberg.info.nt>) where he covered its restoration with good photographs.



The two barracks were built originally in 1900 over an existing barn. Wim calls it "the utmost version of the great hooibergen," of the Betuwe region and Zuid Holland. Wim's photographs and e-mail correspondence with him convinced me the Dutch use a different barrack rafter system for a thatch cover than the American-Dutch did, a New World system that I had previously deduced from a few reused barrack plate fragments and one drawing in an 18th century manuscript. Our Old World discoveries on this tour have convinced me that we need to go back and measure common-rafter mortise angles and rethink the New World design. Could it pre-date the Old World system?

As Wim had written, our journey began at de Werff farm with a "warm welcome of SKHN and the owners of this *schuurberg*, (barrack with raised floor and extensions) Bea and Arjin Vette.", After lunch Bob and I were interviewed by two lovely young women from the local TV.

These two 4-pole thatched barracks have traditional Dutch rafter systems and the holes in the poles are set diagonally to the plates and are rigged with some of the same hardware known to have been used in the Hudson Valley. One tool, the barrack-screw (*bergheef*, *bergwinde*, *bergwaag*, *bergnaaf*) (*) "has been used in a great part of The Netherlands. It is made of elm or cherry wood. They were made in different sizes for one, two, four, five and six pole barracks." (**)

At the de Werff Farm we examined a collection of barrack hardware and parts of a *snijtte*, a tool to cut the thread in the beam (*dwarshout*) of the barrack-screw. We had planned to visit the retired barrack builder who is making barrack screws and have him show us how to do it, but his daughter was getting married that day and he could not be at home. Instead, we went to the river Linge to see the large barracks standing along the river there, and drove atop the dike along the river Waal with views of farms and barracks below.

We stopped in the village of Doesburg on the river IJssel to visit its 13th century gothic church. It was remodeled in the 16th century by the Calvinists, no statues or murals and the tall leaded windows are of clear glass. There is a good interpretive display in the church with its history and a large scale model of the framing of the spire. Further along the IJssel we stopped at Old Bronckhorst to walk through the smallest city in Holland with old buildings and full city rights, to find a café with Dutch beer.