

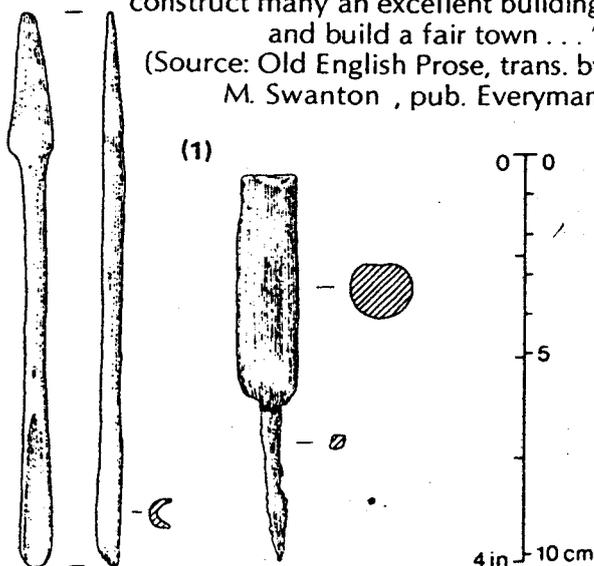


THE USE OF WOOD FOR BUILDING

Both the Vikings in Scandinavia and the Anglo-Saxons in England built their houses of wood, although after the Anglo-Saxons accepted Christianity, some of their churches were built in stone. People had, of course, been building in timber for thousands of years, and probably knew much more about working in wood than most of us do today. A wide range of wood-working tools had been developed, including axes, chisels, hammers, saws and gouges, (1) and there was plenty of timber available for use. However, the problem with timber buildings was that they could easily catch fire and could decay very quickly, which meant that they had to be repaired and replaced more often than stone structures. We know from King Alfred's own description how a man set about building a wooden house in Anglo-Saxon times: —

"Then I gathered for myself staves and posts and tie-beams, and handles for each of the tools I knew how to use, and building-timbers and beams, and as much as I could carry of the most beautiful woods for each of the structures I knew how to build. I did not come home with a single load without wishing to bring home the whole forest with me, if I could have carried it all away; in every tree I saw something that I needed at home. Wherefore I advise each of those who is able, and has many waggons, to direct himself to the same forest where I cut these posts; let him fetch more there for himself, and load his waggons with fair branches so that he can weave many a neat wall and construct many an excellent building, and build a fair town . . ."

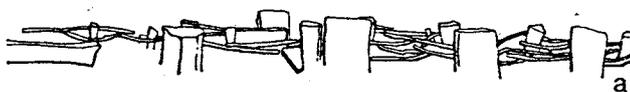
(Source: Old English Prose, trans. by M. Swanton, pub. Everyman)



EXCAVATING WOODEN BUILDINGS

Usually the most that an archaeologist can hope to find of an ancient timber building is its foundations. Fortunately, where posts and beams have rotted away, the holes and trenches dug for them can normally be detected, because their position will be marked by changes in soil colour and texture. But it is not possible to be sure what such buildings looked like above ground. In York, however, special soil conditions have not only preserved the foundation timbers of the buildings but even the lower parts of the wooden walls too, greatly increasing our knowledge of Viking houses in England.

(2)



The remains of part of a wall made of wattle-work, seen from the side (a) and from above (b).



BUILDING METHODS

Two different types of Viking buildings have been found in York. The first type, of the early 10th century, had walls made of wattle-work. (2) Twigs, known as withies, were bent and interwoven around upright stakes and posts to make a wattle screen which was probably weatherproofed by being plastered with a clayey mixture known as daub. Fragments of daub, on which the marks of the wattle-work could be seen, were found during the Coppergate excavation, but they were not attached to standing walls and may have been part of ovens or other fittings.

The ends of the buildings lay beyond the limits of the excavation, so their total length is unknown, but they were at least 6.8m long by 4.4m wide. They stood along the Viking street on plots of land divided by wattlework fences, and the lines of these plots (or tenements) continued to be used for the next thousand years, until in recent times much larger buildings have blotted them out.

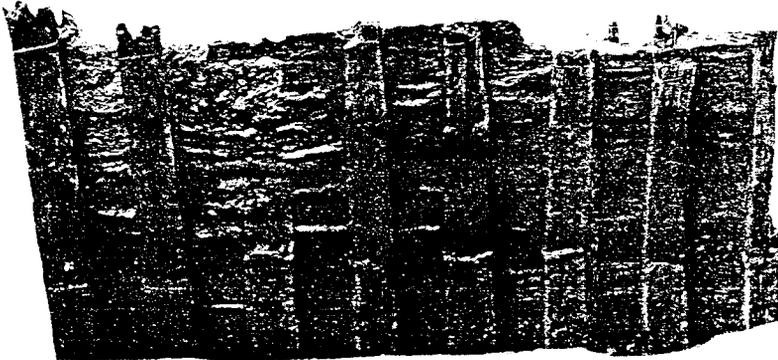
Being of timber, the Viking houses had to be frequently rebuilt, perhaps on average every 20 years. Each rebuilding took place at a slightly higher level, because the ground surface rose as more and more house rubbish was trodden into the earth floor. Fortunately this

meant that the lowest parts of the old buildings were left intact when replaced by new ones, and it has been possible, therefore, to note how building methods changed.

Strong upright posts were set along the wattle walls to hold up the roof, and the size and position of these posts often changed during rebuilding. The wattle-work was usually made of hazel and willow, but other woods were sometimes used too. The floors were simply of earth, with a large rectangular hearth in the middle, marked out with stone blocks, wooden beams or even old Roman tiles. The only trace of any furniture was a pair of benches, made by piling up earth and turf against the wall, and then surrounding it with a low length of wattle-work.

No roof material was found, so the roof was not made of tiles, slates or wooden shingles. Probably thatch was laid on a framework of poles and branches. The buildings had only a ground-floor — there was no upstairs or cellars — and probably served as workshops as well as houses, since the people of Coppergate in Viking times all seem to have been craftsmen.

The second type of Viking building in York became popular after about 970. Its floor was dug out until it was about 1.8m below the ground level outside. Such buildings had been constructed before in England, early in Anglo-Saxon times, and were also known elsewhere in north-west Europe. Now, in the 10th and 11th centuries, they became popular again, as town-houses. There was no need for wattle-and-daub; strong oak planks lined the side walls of the sunken part of the building, and probably continued above ground as well. (3) These planks were held in place by regularly spaced squared oak posts, which rested on massive foundation beams. Much more timber was used than in the earlier type of house, but they probably lasted longer.



(3) Planks and upright posts formed the walls of sunken buildings.

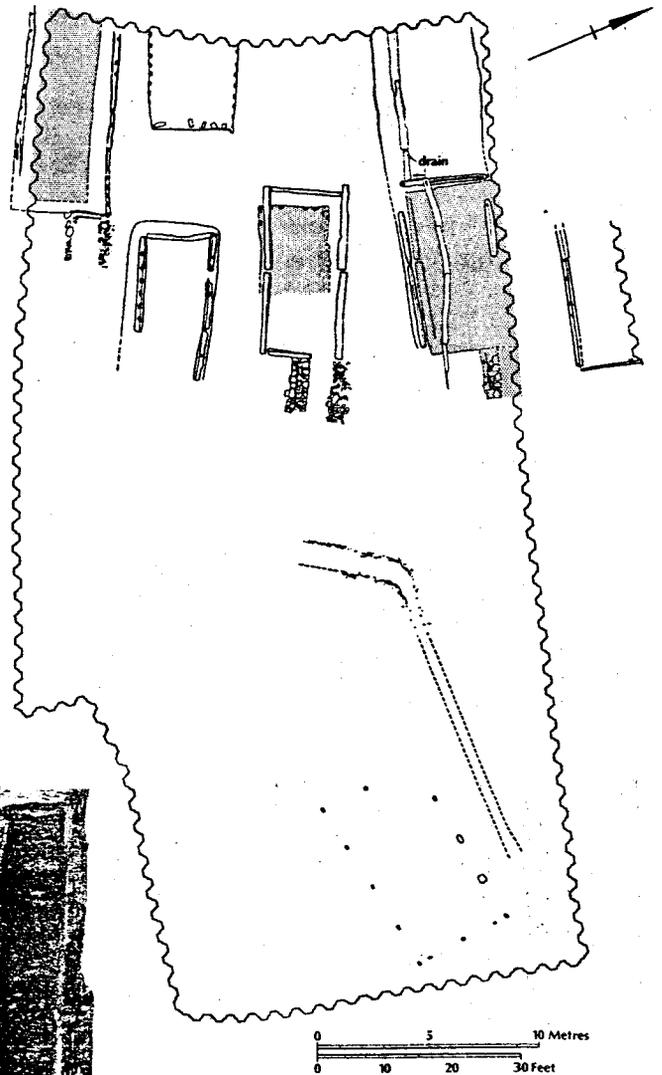
A typical example would be about 7.5m long by 4.2m wide; again it is unlikely that there were upstairs rooms, but there may have been storage space under the roof. Floors again were normally of earth, although one building had a plank floor resting on timber supports (joists). There were no signs of hearths, so heat may have been provided by braziers. The builders

certainly wanted to make their homes warm and comfortable. One house had a cavity wall to reduce heat-loss, and others used a lining of woven twigs to keep in the heat. Roofs were probably thatched, as before.

THE USE OF THE BUILDINGS

These later Viking buildings, like the earlier ones, lined the street front at Coppergate, but there was now also a second row behind. (4)

Objects found show that the front row were probably houses, with a stall onto the street for the sale of goods, whilst the row behind were most likely to be workshops. People entered the buildings by way of passages. At the back were yards, wells, storage pits, rubbish pits and cesspits, on ground that sloped down to the river Foss.



(4) The Coppergate site c. AD 1000.

The street of Coppergate is at the top, outside the excavated area, and below are the houses and workshops of the four properties, with yards behind them. A little later, a drainage channel was cut nearer to the River Foss, and a warehouse built (you can see the post-holes). The shaded areas are where rebuilding took place at this time.

These were the latest buildings found at Coppergate before the Norman period, and are the last sunken houses known to have been built in York.