

# Combs and comb making in Viking Age and Middle Ages

**A short resumé**



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### Combs and comb making in the Viking Age

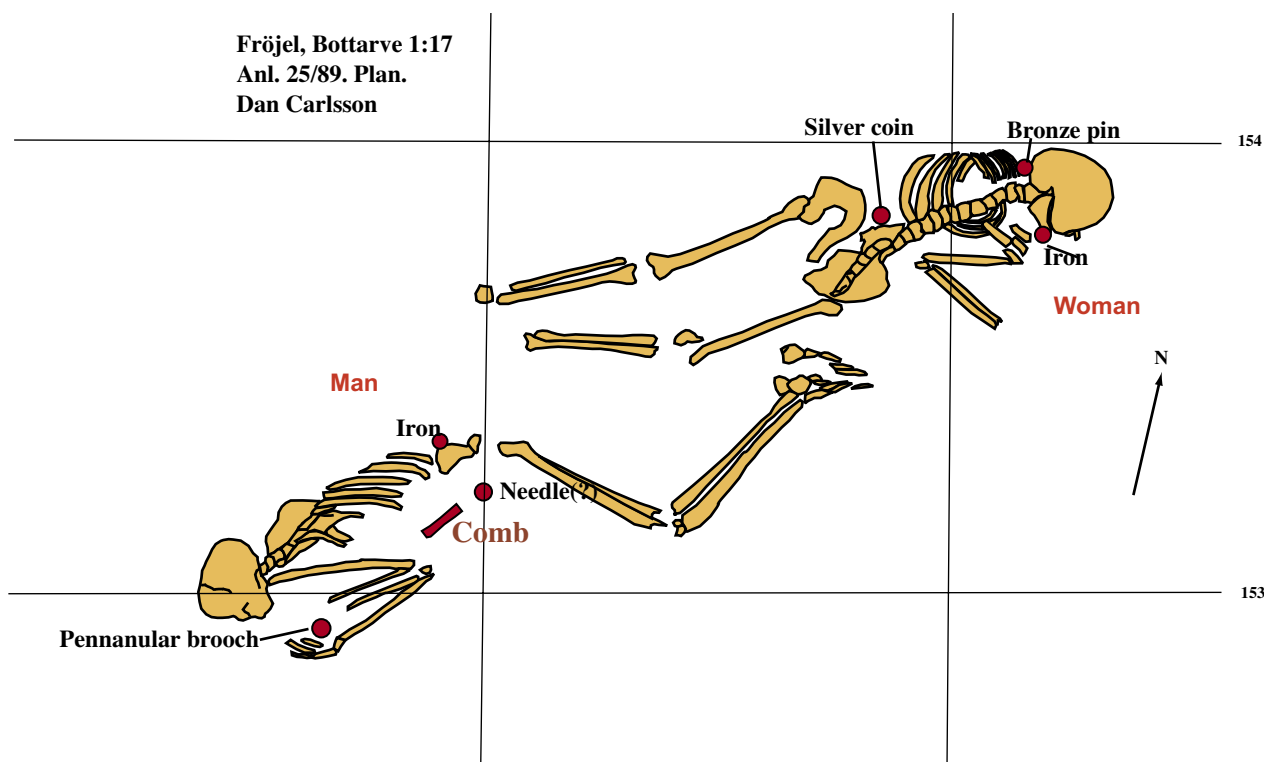
In Scandinavia, combs appear to have been everyday objects but they were, nevertheless, valuable and were not discarded when teeth broke or they were damaged in other ways. There are several examples of repaired combs, some from graves. In most graves, both female and male, the dead are buried with a comb. Besides being a tool to clear out one's hair, the comb also has a religious function as a symbol for cleaning.

The position of the comb in a grave is most often at the side of the dead person and placed in such a way that one can suppose that the comb has been kept in a small bag or leather purse. Very few of the combs are accompanied by a comb case. Normally, a comb with a case seems to be connected with men. Some of these combs, as well as the cases have a hole in the

indeed most unlikely that combs, specifically the bigger ones, were dangled on a chain together with other items of female equipment like scissors, needle cases, etc., and what is more, most combs lack a suitable hole. Combs therefore appear to have been relatively well looked after and may normally have lasted for the greater part of an owner's life.

To judge by the position of the combs among inhumation graves, they were not used in hair arrangements. None of the combs at for instance Birka was found at the end of a grave in which the head lay, and the position of most of them suggests that they were kept in pockets or purses that hung from the waist.

Comb making was a highly skilled handicraft that not everybody could do; it demands special tools and skills. From the find of the tool chest at Mästermyr, Gotland, dated to the 10th



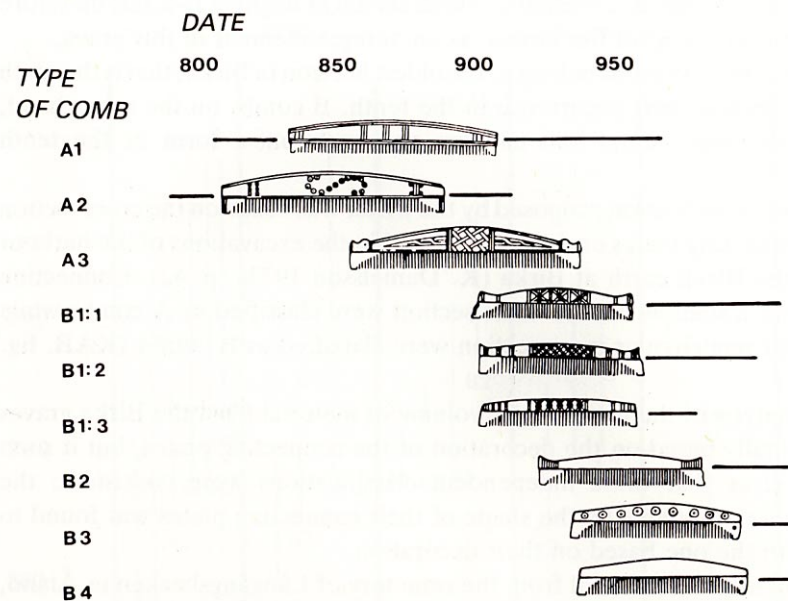
*Two Viking burials at Fröjel Viking Port of Trade on the island of Gotland, Sweden. From the 9th century AD. The man has a comb close to his stomach.*

end, presumably so that they could be hung from a belt.

The association of comb cases with men suggests that the women kept their combs in purses or something similar, and one leather comb case was actually found at Birka. It is

century, there is a saw that looks like a modern hacksaw. In the chest, there was also a piece of elk horn and also rasps that might have to do with bone and antler handicraft (Arwidsson 1983). The traditional interpretation is that they are used in metal handicraft. The making of a

Combs are many times divided into different groups, according to datings, or ways of making them or some other criteria. The combs from the cemetery at the Viking town of Birka in middle Sweden (dated to c. AD 750 - 950) are grouped into two different categories according to construction, form and decoration. The A combs are older and of genuine Scandinavian origin, the B combs are a bit younger and the area of manufacturing is the northern part of Germany and Denmark. After Ambrosiani 1981.



saw blade of a kind that can be used for sawing teeth in combs, meaning an extremely thin and narrow blade, is among the most difficult things a smith can make. Most carpenters could do without such equipment until the 16th century, but not a comb maker (Christensen 1985-86:126).

Antler and bone from wild animals and cattle have been important raw material for making needles, gaming pieces, dices, knops and spoons, and most of all combs (Ryding, Kriig 1985). During prehistoric time the antler and bone worker also used horns from cattle, but generally not for comb making.

The use of cattle horn for comb making doesn't start until the 16th century (Christensen 1985-86). Noteworthy is that horns from cattle very seldom are preserved in the archaeological material, meaning that they might have been more common than we know from our excavations.

On the island of Gotland, there have never been any wild animals like elk or deer. That means that either pre made combs, or the raw material was imported to the island. Evidence from the excavations of harbour and trading places on Gotland has clearly shown that combs were made in these places, indicating that the raw material was imported to the island. (Carlsson 1999).

### Areas of origin and places of manufacture

Combs found through the area from Staraja Ladoga in Russia in the east to Dublin in Ireland in the west show remarkably similar development in both form and decoration, clear evidence for close contacts within that region. Some comb makers may have travelled throughout the whole area from Staraja Ladoga to Dublin, but the uniformity of the material does not necessarily mean that this was the case; it is more likely that several men worked in smaller, but overlapping areas. If there have been local comb makers living at the place for each transaction, there should have been bigger differences between combs from different areas.

Many workshop areas in which combs were made have been discovered throughout the area, showing that combs were not made in a few specialized centres and then distributed by long distance trade, but that they were made in many localities. The small quantities of comb making debris found in these places also shows that combs were not made all the year round in any of them but more likely by craftsmen travelling to several locations to ply their craft.

Comb makers and other craftsmen travelled around between recurrent market places, where they knew they would meet their customers. There was no need for a permanent comb maker; the population was too small to require





*The distribution of combs of Scandinavian origin (A combs) from early Viking Age (top) in the area of northwest Europe. Two main centres can be distinguished; central Sweden and the coastal area of Norway. The arrows indicate the way they spread from their areas of origin.*

*The distribution of so called B combs, where the centres of origin are concentrated to the northern coast of Germany and Denmark (bottom). After Ambrosiani 1981.*



and for a production besides one's own consumption, can in Scandinavia be traced at least 1500 years back in time, meaning to the early iron age. Some beautifully made combs have been found on the island of Gotland, giving a clear indication of the high skills of the handicraft at that early date.

From the beginning, it was obviously a matter of making combs for one's own use, but over time this developed into a travelling system. The

that. There must have been different markets the year around at different locations. Some of the places probably also had a Ting at the same time, as was the case with the Gotlandic Ahlting, held every year around midsummer at Roma.

The travelling craftsmen took with them a supply of raw material from one place to another, especially to places like Gotland, that never have had any antler or horn carrying animals except for cattle for the craftsmen to buy. Coming to a new place, might have involved a certain amount of buying raw material from the local population (Ambrosiani 1981).

### **The development of comb making**

The making of combs as a specific handicraft

development of the pre urban production of combs can best be described as going through 3 phases, with the production for one's own use as the first step.

The second phase meant that comb makers travelled between different markets during a restricted period of time. Like other craftsmen, comb makers must have travelled to places in which regular markets were held and where they knew that they would find customers. Markets must have been held regularly at the same time every year, and some were probably associated with meetings at Ting.

Of special interest with this handicraft is the wide range of products that the antler and bone worker produced. It was not only combs, but

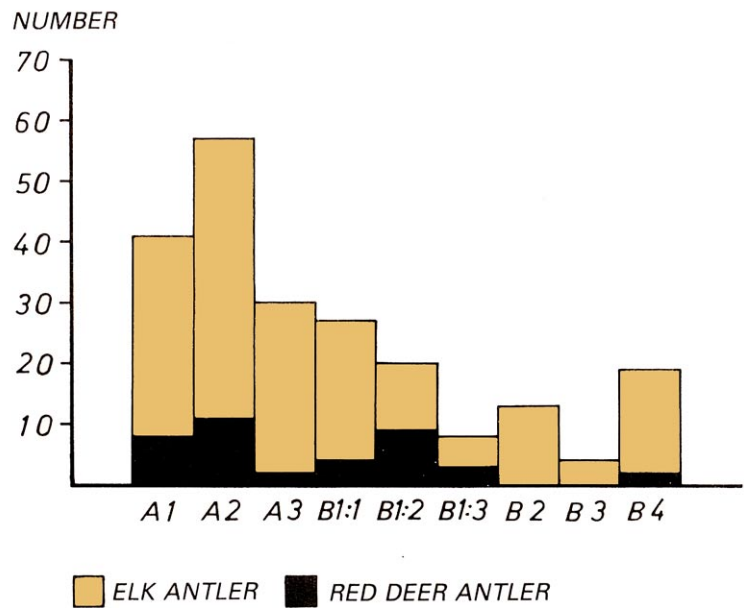
also all the other things made of bone and antler, like different types of needles, well-decorated spindle whorl, gaming pieces and dice. In the archaeological material, this kind of production shows up as a number of smaller heaps of left over from the bone workers.

The third phase is characterised by a continuous production concentrated in a permanent workshop. Comb makers certainly worked in medieval towns. There is ample evidence of their activities and examples of their workmanship in the debris from the workshops.

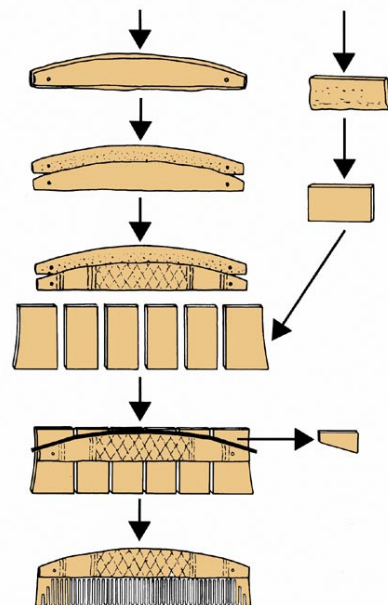
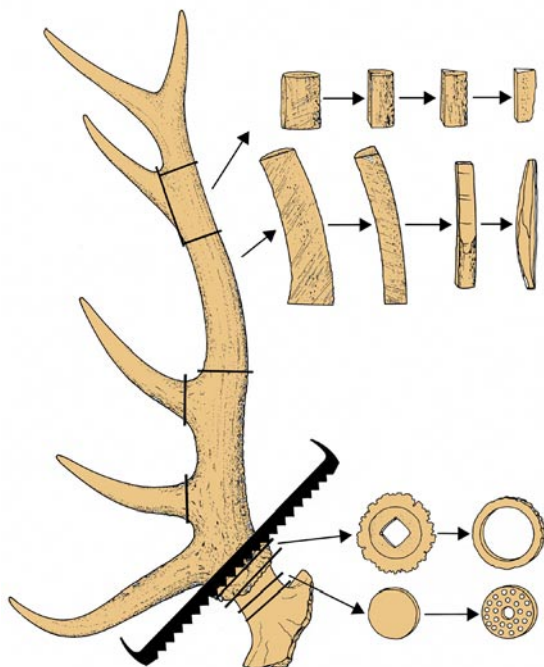
The production is specialised to a smaller range of products. Archaeologically, this shows up as fewer, but bigger heaps of waste from the production, being deposited over a longer period of time, showing a continuation in the production.

### How to make a comb

The material used for making combs is mainly parts of antlers, mostly from red deer, elk and sometimes also reindeer. Looking at the



*The most common type of antler to be used in comb making were elk, and to a smaller portion red deer. Cattle and reindeer were sometimes used, but to a very small portion. The figure shows the distributions of combs made of different material at the cemetery at Birka, Sweden. After Ambrosiani 1981.*



*The first step in making a comb is to saw the different parts from the antler. The figure to the left shows how the antler was used for different parts of a comb. The longer part became the connecting plates, the shorter the tooth plates. The figure to the right shows how the comb was put together.*

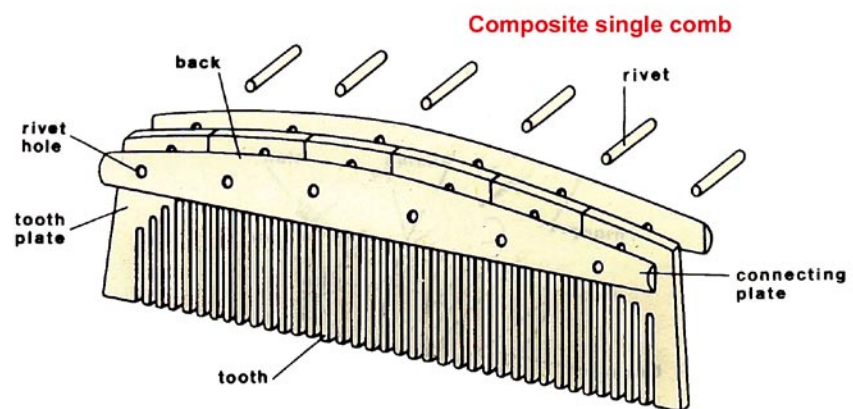


*A composite single comb seen from the side, showing the different tooth plates and the rivets.*

material from the combs in the graves at the Viking town Birka in middle Sweden, clearly shows that antler from elk totally dominated as raw material for comb making in the early Viking Age. Antler from red deer was probably mainly imported from the northern part of present day Germany and was imported in the form of complete antlers. Another source of raw material was the middle foot bone from cattle (metatarsus).

Looking at the debris from the comb making, it is clear that some equipment for chopping, as well as saws and files in some form was used. Also some material to smooth and polish the surface of the comb has been used.

To cut and to split the raw piece of antler a heavier saw blade has been used, a much thinner (0,6 mm) saw blade to cut the heavier teeth of the comb and an even thinner blade (0,2-0,3 mm) to cut the fine teeth. A rasp and a file were used for working and forming the tooth plates and the connecting plates. The making of the teeth was time consuming and a difficult task.



*The most common comb in Viking Age is the composite single comb (above). Some of these combs have a case to fit in the comb. Most of the combs with cases belongs to men, and usually there is a hole in the case to lock the comb into it. The rivets are normally made of bronze, but could also be of iron. After Ambrosiani 1981.*

### **Different types of combs**

During the Viking Age and Middle Ages, we can distinguish three different main types of combs in use. They are in a way following each other through time. The most common type of comb, from the middle of the Iron Age (6-7<sup>th</sup> C) is the composite single comb. During the 11<sup>th</sup> century, it is overtaken by a new type of comb, made out of a single piece of antler or bone, the so-called double one-piece comb. This kind of comb is very common in the early middle Ages, and found in most places of settlement at that time. The middle Ages saw also a new type of comb, quite often heavily decorated. That is the so-called composite double comb.



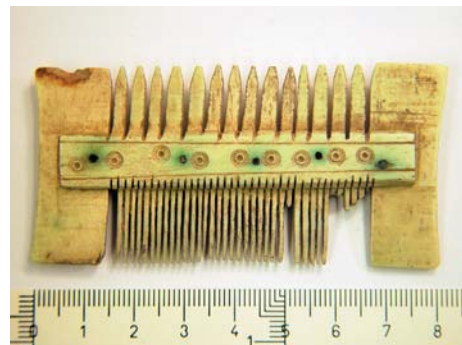
# Different forms of Viking and Medieval Combs



Single composite combs are mainly from the Iron Age, including Viking Age. The oldest form is represented by the comb to the left, belonging to the 6th-8th century. The comb to the right is a bit younger and can be dated to the 8th to the 9th century.



During Viking Age, the most common comb is still the composite single comb. In the late Viking Age, the combs changed into longer and more elongated combs, like this one dated to the 10th-11th century.

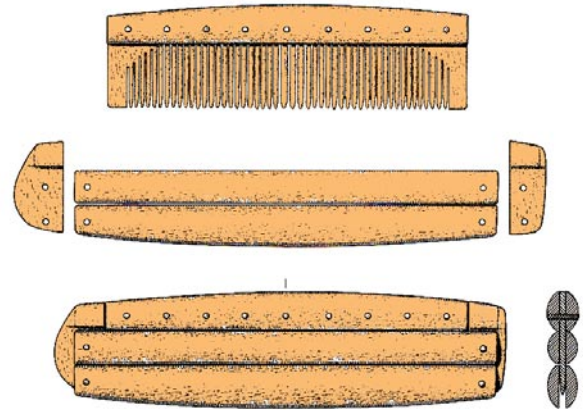


In the late Viking Age - Early Middle Ages, a new type of comb came into use - the double comb. The oldest type is the one to the left, made in one piece from elk antler, dated to 11th-12th century (double one-piece comb). From around the 12th to the 15th century, the normal comb was a composite double comb, as the one to the right.

### Composite single combs

The composite single combs can be divided into two groups according to their size, the form of the end plates, and the cross-section of the connecting plates. The bigger combs have curved sides, which means that they cannot have been stored in cases, whereas the smaller, fine-tooth combs have straight or slightly concave ends to make it easier to insert them into a case. All the combs in the latter group are undecorated and have a hole at the side where they could be attached to the case. Besides differences in size and configuration, the combs differ in that the cross-section of the connecting plates in the former group is a vertically set oval, while in the latter group it is horizontally rectangular.

The composite single combs from the extensive cemetery at the Viking town Birka are divided into two different groups, where A combs are the older ones, and obviously a Scandinavian type. The second group is called B type, and seems to be produced along the southern coast of the Baltic Sea (see page 2).



Comb with case

### Cases for composite single combs

Comb cases can be divided into two groups according to the cross-section of the connecting plates. The largest group has plates that are convex on both sides. The group is highly uniform as regards workmanship and size. The cases vary normally in length between 15 and 18 cm, and the sides are virtually square in shape. One side of a case usually has a large hole bored through it for a ring with which it could be suspended. All the cases are usually



*An unusually well preserved example of a composite single comb with a case. From a male grave at the cemetery Kopparsvik close to the town of Visby, Gotland*



decorated.

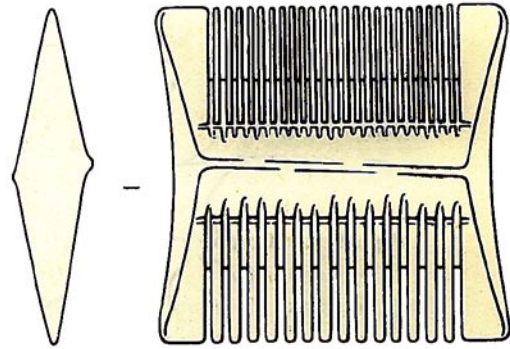
The most common ornamentation consists of two rows of closely spaced dotted circles. Decorated comb cases with a double-convex cross-section appear to be relatively rare. In the published material the only examples come from Gdansk in Poland and from Gråborg on the island of Öland.

The other group of comb cases is characterized by the cross-section of the connecting plate being evenly bowed or slightly ridged. The intact cases are highly uniform. The ends are square or rectangular and the connecting plates are slightly convex on the lower edge. The cases are decorated in a similar way with two rows of simple dotted circles, each row framed by a line cut along the edge and the central axis of the comb.

#### **Double one-piece combs**

The comb is made of one piece from the central part of antler from elk. The time of use for this kind of comb is roughly from the 11<sup>th</sup> C to the

#### **Double one-piece comb**



*Double one-piece comb. They are almost always made of the antler of elk, and in one piece. The cross section is normally rhombical.*

early 13<sup>th</sup> C. The most common type in the medieval material is one with the end contours being more or less pronouncedly concave. The cross-section is almost always rhomboid with relatively sharp ridges. Some combs, however, show an almost cylindrical section. Normally, the decoration consists solely of 3-5 parallel lines sawn along the base of the two rows of teeth. The plan is almost wholly rectangular.



*Double one-piece comb, from the settlement area of the Viking Port of Trade at Fröjel, Gotland, Sweden. Made of antler from elk. One side has coarse teeth, the other fine teeth. The decoration consists of four straight lines across the comb. Seen from the side, one can clearly see the rhombic shape of the comb. Photo D. Carlsson.*

### Composite double combs

The most common comb from the middle Ages is the so-called composite double comb. The majority of the combs from Eketorp on Öland, as well as from Gotland and Lund in southern Sweden are composite double combs. These are divided into three main groups according to the shape of the ends: concave, double-convex, and straight. As a hypothetical variable independent of the shape of the sides, the cross-section of the connecting plates is considered.

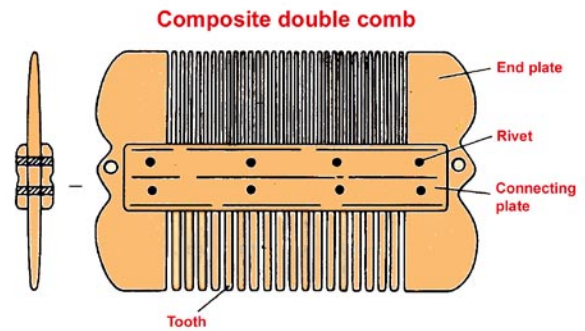
Combs with concave ends make up the biggest group among the composite double combs. The combs in this group mostly have a profiled connection and only a few of them have any real decoration. The rivets are as a rule relatively widely spaced, with two per tooth plate. These combs belong mainly to the 13<sup>th</sup>-15<sup>th</sup> century.

### Comb beater

From the normal combs, there is a specific type that differs considerably. It is well known on the continent, but seems not to occur in Britain. In Scandinavia, it occurs in different town material, as in Lund, and Eketorp on the island of Öland. From Gotland, there are at least 5 examples known. The function of the comb is not fully understood. It is generally referred to as a comb beater. The “handle” end is normally decorated with some lines across it.

These combs have clearly been cut from long bones, principally the metatarsus of cattle, as can be seen from the characteristic foramina and spongy tissue which often survives at the “handle” end. The teeth are cut long and straight and show secondary shaping only at the tips. There is never any sign of wear further up the teeth suggesting that, despite their length, it was only the extremities of the teeth which came into contact with the material being combed. This fact makes their identification as weaving combs seem unlikely, as has been pointed out by many researchers.

As Ingvild Øye puts it; “The spacing and number of the teeth tell against the long-toothed comb being a comb-beater or wool carding comb. As the pointed form of the teeth and



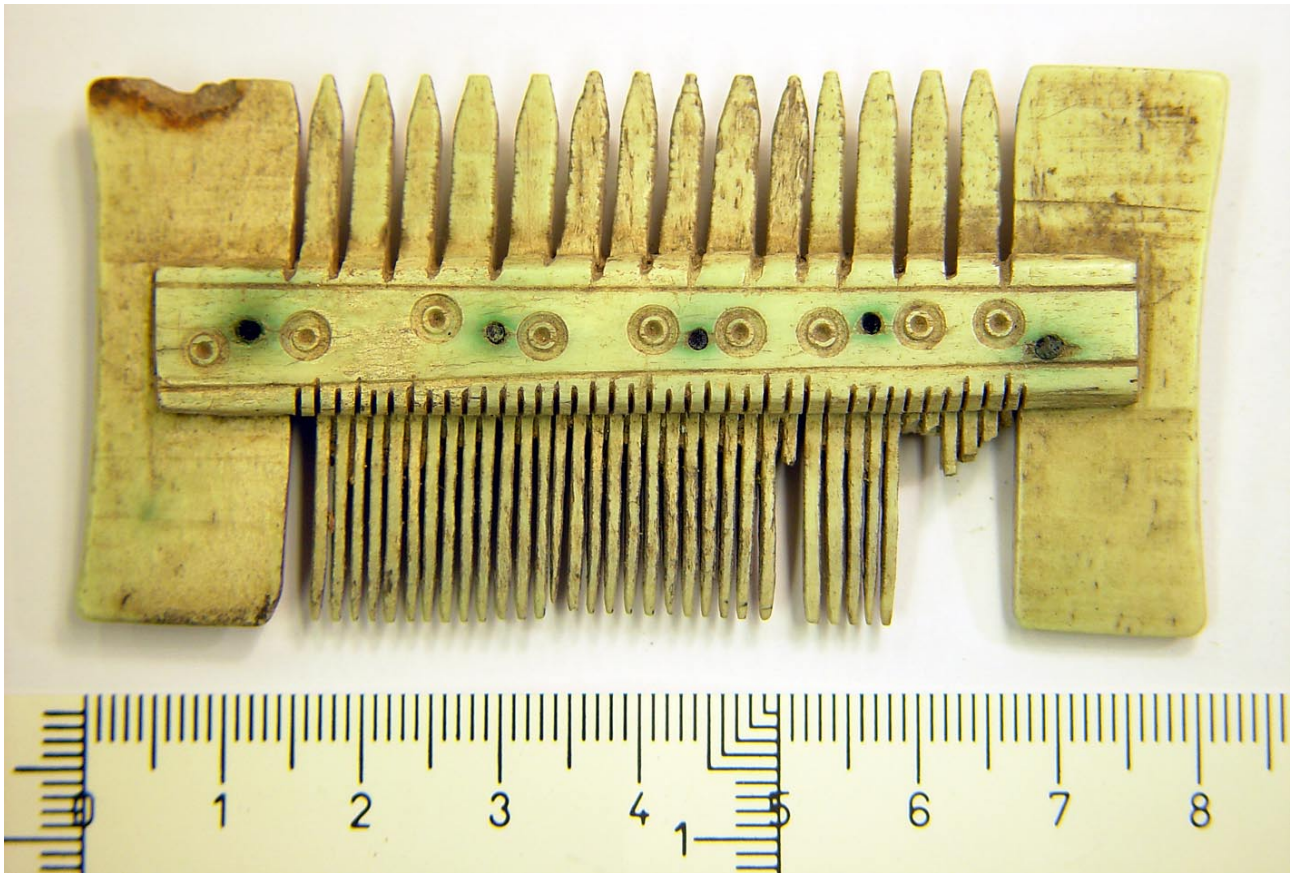
*The different parts of a composite double comb. The number of tooth plates used to be 3-5, dependent on how big the comb is. Displayed on the next page, there are two examples of composite double comb.*

the polish marks are the same as on ordinary medieval combs, I find Ulbrechts interpretation the most plausible: that the combs have been most likely used for combing the hair” (Øye 1988).

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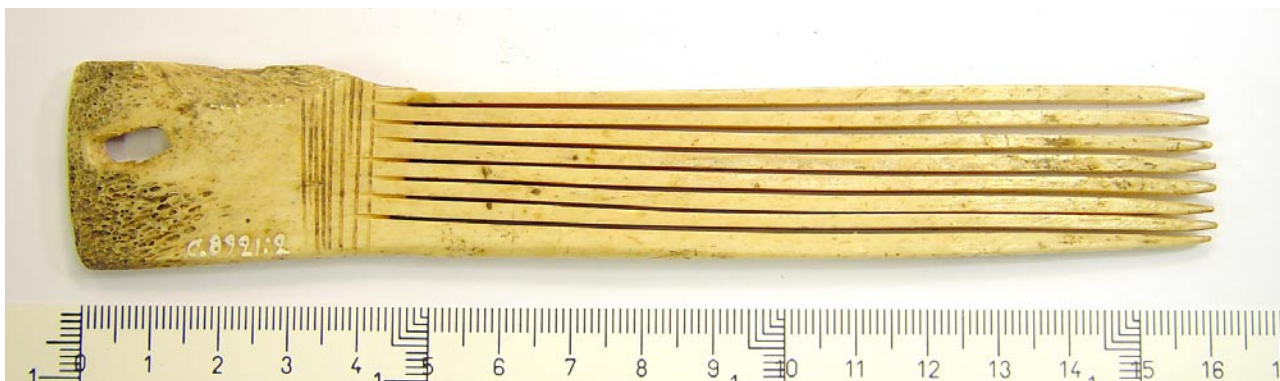




*A well preserved composite double comb from the town of Visby, Gotland, Sweden. The comb consists of 5 plates of teeth, held together by a decorated bone plate on each side. It should be noticed the cut mark on the connecting plate, showing that when cutting the teeth, they also cut into the plate in such a way that they actually might have used a string to cut the teeth instead of a hacksaw. These marks on the connecting plate are very common, and sometimes rather deep, meaning that it might not have been made by a hacksaw. Photo D. Carlsson*







This type of comb is not very clear what it has been used for. Normally, they are called *comb beater*, and one suggestion is that it has been used in weaving. They are made out of metatarsus from cattle. On many of the comb beaters "it is possible to distinguish clear traces of wear on the outermost third of the teeth, like small notches in the corners of the upper side. These traces have been interpreted as having arisen when the teeth of the comb beater were inserted between the warp threads in a loom to press the weft together. This interpretation, however, seems highly uncertain if one envisages a large loom such as the upright type with loom weights of clay. It is doubtful whether beaters with such long teeth would really have been suitable for the purpose" (Borg 1998). Ingvild Øye believes, like Ulbrecht, that they actually were combs to be used combing ones hair (Øye 1988).

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