



EYEWITNESS BOOKS



VIKING



Discover the story of the Vikings – their ships, weapons, legends, and saga of war and discovery

Eyewitness VIKING





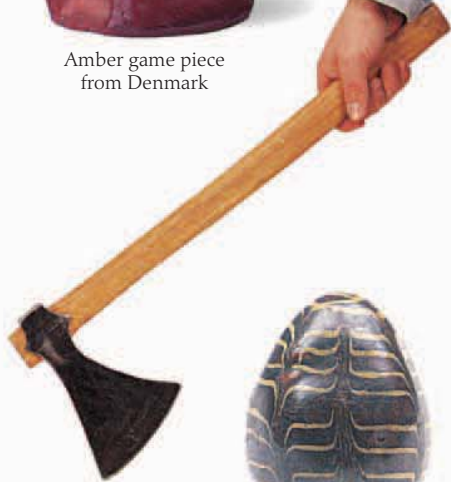
Part of a gilded bronze harness from Broa, Sweden



Two gold rings



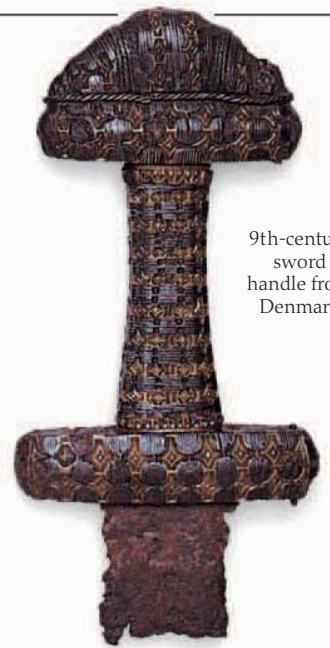
Amber game piece from Denmark



Resurrection egg



Gold arm-ring from Denmark



9th-century sword handle from Denmark



Viking peasant warrior

10th-century figure of a man riding a horse, from Sweden





Replica of a ship's detachable figurehead

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Gilded bronze harness bow from Denmark

Written by
SUSAN M. MARGESON

Photographed by
PETER ANDERSON



Belt mount from the Volga region in Russia



Norwegian Urnes-style brooch

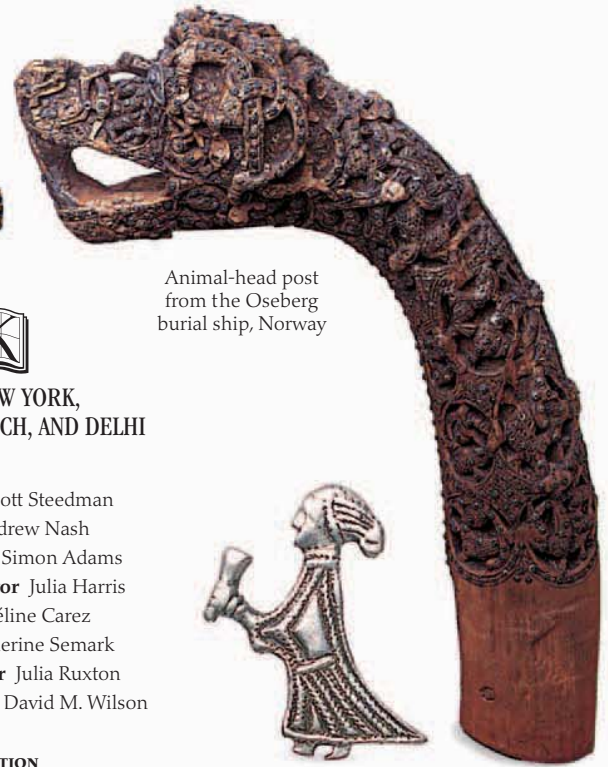


Thor's hammer





The Åby Crucifix from Denmark



Animal-head post from the Oseberg burial ship, Norway



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Silver pendant of a Viking woman



Bronze key from Gotland, Sweden

Silver brooch from Birka, Sweden



Danish coins



Gilded bronze mount from horse's bridle, Broa, Sweden



The Jelling Cup



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Gilded copper weather vane, probably used on a Viking ship

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Who were the Vikings?



ROMANTIC VIKINGS

There are many romantic fantasies about Vikings. Most of them are wrong! Many pictures show them wearing horned helmets.

But real Vikings wore round or pointed caps of iron or leather (p. 13).

FOR 300 YEARS, from the 8th to 11th centuries, the Vikings took the world by storm. In search of land, slaves, gold, and silver, these brave warriors and explorers set sail from their homes in Norway, Sweden, and Denmark. They raided across Europe, traveled as far as Baghdad, in modern Iraq, and even reached North America. The speed and daring of Viking attacks was legendary. Christian monks wrote with horror about the violent raids on monasteries and towns. But the Vikings were more than wild barbarians from the north. They were shrewd traders, excellent navigators, and superb craftsmen and shipbuilders. They had a rich tradition of story-telling, and lived in a society that was open and democratic for its day.



SCARY SHIP

Vikings often carved terrifying beasts on their ships to scare their enemies (p. 10). This dragon head was found in a riverbed in Holland. It dates from the 5th century, 300 years before the Viking Age. It may have been part of a Saxon ship sunk during a raid. Sailing ships were known before the Vikings, but they were less sophisticated. Viking ships were fast and flexible, and could cruise up narrow channels and inlets with ease.

CATTY BROOCH

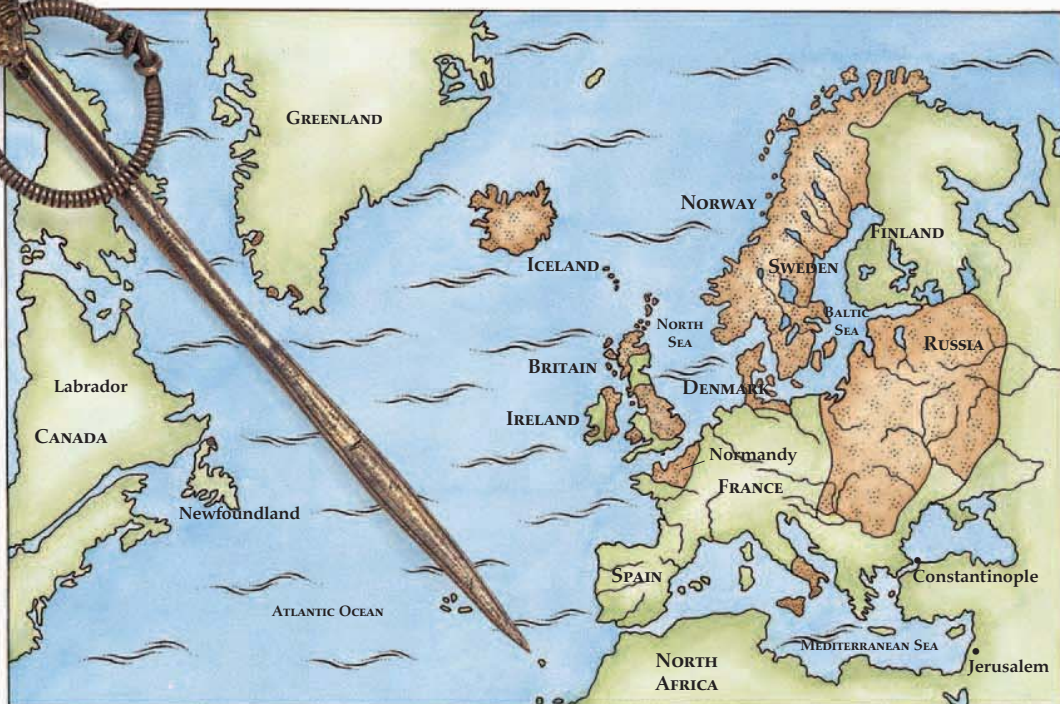
A Swedish Viking held his cloak in place with this brooch. It is made of silver coated in gold. The details are highlighted with niello, a black metallic compound. The style of decoration, with little catlike heads, is known as the Borre style.

THE VIKING WORLD

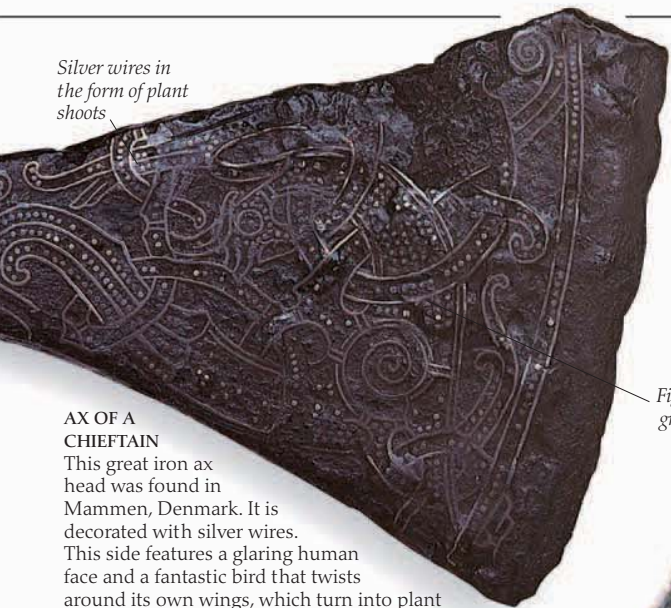
The brown areas on this map are Viking settlements. From late in the 8th century, Vikings raided, traded, and explored far and wide. They discovered Iceland in 870 and sailed farther west to Greenland in about 985 (pp. 20–21). Leif the

Lucky was probably the first European to set foot in North America. He is thought to have landed in Newfoundland, Canada, in around 1001. Vikings sailed east over the Baltic Sea and continued up rivers into Russia. They went on overland as far as the cities of Constantinople (now Istanbul) and Jerusalem. Other Vikings sailed around the west coast of Europe and into the Mediterranean Sea.

Thanks to their ships and seafaring skills, they could take people completely by surprise.



Silver wires in the form of plant shoots



AX OF A CHIEFTAIN

This great iron ax head was found in Mammen, Denmark. It is decorated with silver wires. This side features a glaring human face and a fantastic bird that twists around its own wings, which turn into plant shoots. The Mammen Ax is too beautiful to have been used in battle and must have been carried by a chieftain to show his power.



Loop so that the hammer could be worn on a neck chain

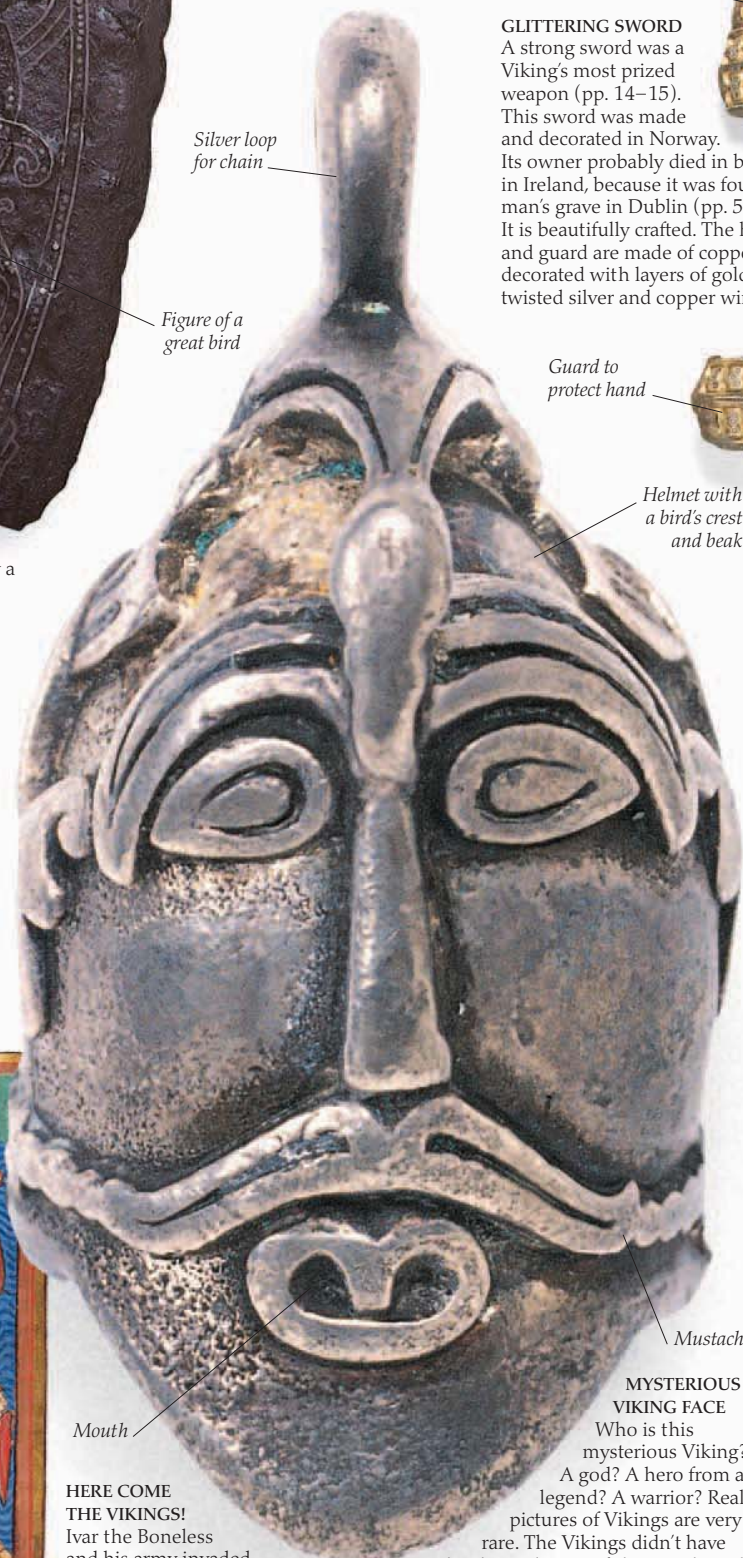
THOR'S HAMMER
Vikings believed in many different gods (pp. 52–53). This silver hammer is the sign of the great god Thor. He was said to ride his chariot across the sky, smashing giant snakes with his hammer and making thunder and lightning.



HERE COME THE VIKINGS!
Ivar the Boneless and his army invaded England in 865, and again in 869. This manuscript (made 300 years later) shows ships full of armed warriors arriving at the coast. The first raiders are walking down gangplanks onto the shore. Ivar and his men terrorized the country and killed King Edmund (p. 17).

Silver loop for chain

Figure of a great bird



Pommel

GLITTERING SWORD
A strong sword was a Viking's most prized weapon (pp. 14–15). This sword was made and decorated in Norway. Its owner probably died in battle in Ireland, because it was found in a man's grave in Dublin (pp. 54–57). It is beautifully crafted. The hilt and guard are made of copper decorated with layers of gold and twisted silver and copper wires.

Grip, once covered in leather

Guard to protect hand

Helmet with a bird's crest and beak

Mustache

MYSTERIOUS VIKING FACE
Who is this mysterious Viking? A god? A hero from a legend? A warrior? Real pictures of Vikings are very rare. The Vikings didn't have books, and most of the people and animals (pp. 36–37) in their art are imaginary or hard to identify. This small silver head from Aska, Sweden, was worn on a chain as a pendant. It may have been meant to scare away enemies or bring good luck.

Iron blade, now rusted

Lords of the sea

THE VIKINGS WERE SUPERB sailors. Their wooden longships carried them across wild seas, riding the waves, dodging rocks and icebergs, and surviving storms. In open seas, the Vikings relied on a big, rectangular sail. To maneuver in coastal waters and rivers, they dropped the mast and rowed the ship instead. Whenever possible, they sailed within sight of land. Far from the coast, Vikings navigated by the Sun and stars. Their knowledge of seabirds, fish, winds, and wave patterns helped them find their way. Wood rots quickly, so there is little left of most longships. But, fortunately, a few have survived, thanks to the Viking custom of burying rich people in ships (pp. 54–57). The best preserved are the Oseberg and Gokstad ships from Norway. Both are slender, elegant vessels, light but surprisingly strong.

Sixteen strakes on each side, each one overlapping the strake below

Sixteen oarports (holes for oars) on each side

GOKSTAD SHIP, FRONT VIEW

One of the grandest Viking ships was found at Gokstad, beside Oslo Fjord in Norway. It was excavated in 1880. The elegant lines of the prow and strakes (planks) show the skill of the shipbuilders. The ship is 76 ft (23.2 m) long and 17 ft (5.2 m) wide. The keel is a single piece of oak, cut from a tree at least 82 ft (25 m) tall!

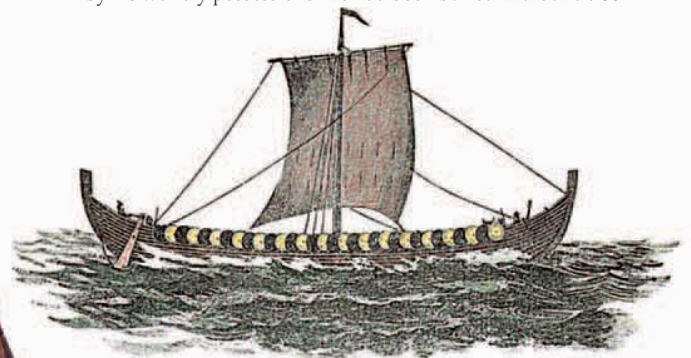
Stem-post, or prow

Ship is made of light oak wood with a heavier mast of pine



DIGGING OUT THE SHIP

The Norwegian ships were preserved by unusual wet conditions. The Gokstad ship sat in a large mound with a burial chamber on its deck. The skeleton of a man lay in the chamber, surrounded by his worldly possessions. He had been buried in around 900.



SAILING TO THE WINDY CITY

The Gokstad ship had 32 shields on each side, alternately painted yellow and black. A full-size replica was sailed across the Atlantic Ocean to Chicago in 1893.

It proved how seaworthy the real ship must have been.



LEARNING THE ROPES
Coins and picture stones give clues about how Viking ships were rigged (roped) and sailed. This coin, minted in Hedeby, Germany, shows a ship with a furled (rolled-up) sail.

Gunwale (top strake)

Mast

Mast fish, to lock the mast in place

Deck boards

RAISING THE GOKSTAD MAST

The heavy mast was lowered into a groove in the keelson and held in place by the mast fish. The deck boards were loose, so the sailors could store their belongings under them.

Keel

Keelson, which runs above the keel

Strakes

Keel

HEAVENLY BED POST

A mass of everyday objects was buried in the Gokstad ship. These included the dead man's clothes, a cauldron, six wooden cups, a bucket, six beds, three boats, a sled, tent frames, plus the skeletons of 12 horses, six dogs, and a peacock. One of the beds had two posts carved with animal heads. The dead man wanted to take all his belongings with him to Valhalla, the Viking heaven (p. 53).



Carved tongue

Oak



Proud lion, which would always point away from the wind

Vane was probably mounted on the ship's prow along this edge

Copper alloy coated with gold

Figure of a great beast, like the animal on the Jelling Stone (pp. 60-61)

Lookout

Dragon head

Strakes shown on the hull

Shield



BOAT BROOCH

A Danish Viking woman wore this brooch in the 9th century. It is shaped like a ship, with strakes and shields along the side, dragon heads at the prow and stern, and even a lookout up the mast!

BLOWING IN THE WIND
Weather vanes are used to tell the direction of the wind. This one is from Söderala Church in Sweden. It may once have swung from the prow or mast of a Viking ship. When King Svein Forkbeard's ships left Denmark to conquer England in 1013, a French monk said they glittered with "lions molded in gold" and "birds on the tops of the masts."



CHANGING COURSE

The steersman held the tiller, a wooden bar that slotted into the top of the steering oar (p. 11). The Gokstad tiller is decorated with a carved animal head.

Leather strap holds the steering oar in place

Tiller

Strakes are held together by iron nails (p. 25)

Keel stops the ship from sliding sideways in the wind

GOKSTAD SHIP, STERN VIEW

The Viking ship was steered by a large oar with a long, flat blade. The Gokstad steering oar is 10 ft 9 in (3.3 m) long. The steering oar was always attached to the right side of the ship near the stern. In English, a ship's right side is still called starboard, after the old Norse word *styra* (to steer). The Gokstad ship is symmetrical—the prow is identical to the stern, except that it has no steering oar.

Steering oar

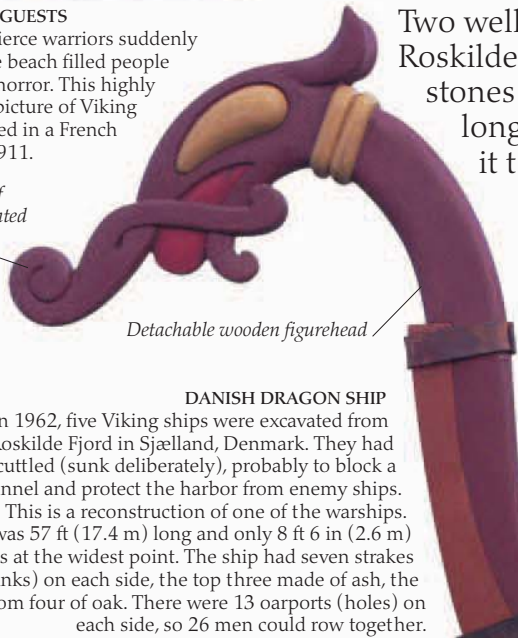
A Viking warship



UNWELCOME GUESTS

A ship full of fierce warriors suddenly landing on the beach filled people with fear and horror. This highly romanticized picture of Viking raiders appeared in a French magazine in 1911.

Dragon made of carved and painted pine wood



Detachable wooden figurehead

DANISH DRAGON SHIP

In 1962, five Viking ships were excavated from Roskilde Fjord in Sjælland, Denmark. They had been scuttled (sunk deliberately), probably to block a channel and protect the harbor from enemy ships.

This is a reconstruction of one of the warships. It was 57 ft (17.4 m) long and only 8 ft 6 in (2.6 m) across at the widest point. The ship had seven strakes (planks) on each side, the top three made of ash, the bottom four of oak. There were 13 oarports (holes) on each side, so 26 men could row together.

Leather thong holds the figurehead in place



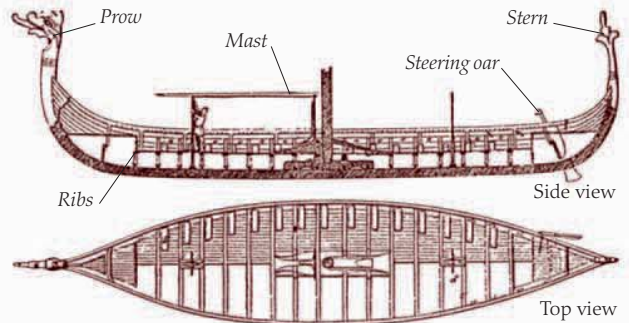
WILLIAM'S WARSHIP

The Normans were descended from Vikings who settled in Normandy, France (p. 16). The Bayeux Tapestry describes their conquest of England in 1066. In this scene, the proud ship of the Norman leader, William the Conqueror, sails toward England. A lookout in the stern blows a horn, while the steersman holds the tiller, attached to the steering oar. The ship has an animal-head prow, and shields line its sides.

LIGHT AND SLENDER, the Viking warship carried warriors far across the ocean. It was the longest, sleekest, and quickest Viking vessel. Like other longships, the warship had a sail and mast, but could also be rowed. Depending on its size, it needed from 24 to 50 oars. On long voyages, the Viking warriors rowed in shifts. They could glide their ship up narrow inlets and land on any flat beach. Even when it was full, the warship had such a shallow keel that it did not need a jetty or quay and could be unloaded right on the shore. Some of the ships carried horses as well as warriors.

When beached, both animals and men could wade ashore.

Two well-preserved warships were discovered in the Roskilde Fjord in Denmark. They had been filled with stones and deliberately sunk around the year 1000. The longest one is 92 ft (28 m) from prow to stern, making it the longest Viking ship ever found.



A SHIP AND A HALF

Cross beams and ribs helped to strengthen the hull of a Viking ship. The gaps between the strakes were stuffed with tarred wool. This is called caulking. It kept the water out and made the ship more flexible in rough seas.

Original rope may have been made of walrus skin

Mooring post

Hull made of seven slender strakes

Each strake overlaps the one below, in a technique called clinker boat-building

FOR THE TILLERMAN

This is a modern replica of a tiller. It slotted into a hole at the top of the steering oar. The steersman always held the tiller on the level. By moving it to fore (forward) or aft (backward), he turned the ship to the left or right. The rope would have been tied to a peg in the deck, to stop the tiller from swinging wildly in a storm.



Slot for tiller

Rope made of plant fiber such as bast or hemp

Lower slot for attaching the oar to the gunwale

Carved and painted wood

Rigging (the ship's ropes)

Sail made of wool or linen, sometimes quilted in stripes or a diamond pattern

Stern (rear)

Prow (front)

Steering oar

In Viking times, this rope would have been made of willow or pine

IN FULL SAIL

This model shows the Roskilde warship in full sail. Viking sails were often dyed blood red, to strike fear into anyone who saw them coming. The shields were slotted into a shield rack that ran along the side of the ship. On other ships, the shields hung from cords.

STEERING OAR

The steering oar was fastened to the gunwale (top strake) by a broad band of leather. Lower down it was also fastened to a wooden boss (knob) on the ship's side with a flexible piece of willow branch or pine root. This allowed the steersman to move the oar easily. In shallow water, he undid the leather band and pulled the oar up.

DETACHABLE

Figureheads and stern-posts may have been detachable. This is a replica stern-post. The Bayeux Tapestry shows ships on the beach with holes in their prows where carved and painted dragon heads may have been attached.

Leather thong to attach to the stern-head

Flat wooden blade

The warriors would pull out their shields when they fought at sea or landed on a foreign beach



RUNNING WITH THE WIND

These warships are loosely based on the ships found at Gokstad and Oseberg in Norway. With a good wind behind it, a Viking warship was fast. In 1893, a replica of the Gokstad ship took 28 days to sail from Norway to Newfoundland, Canada.

Shield rack, a long plank behind which the shields could be rested

Gunwale (top strake)



Viking warriors

THE TRUE SPIRIT OF THE VIKING AGE was daring courage. To the Viking warrior, honor and glory in battle were the only things that lasted forever. A warrior had to be ready to follow his lord or king into battle or on a raid or expedition. As a member of a loyal band of followers, known as a *lith*, he could be called up to fight at any moment. In the later Viking Age, kings had the power to raise a force (or *leithang*) of ships, men, supplies, and weapons. The kingdom was divided into small units, and each unit provided one warrior. Groups of units donated a ship to carry the warriors on a raid to faraway lands.

ARCHER IN ACTION

Vikings were skilled with bow and arrow, both in battle and hunting. A well-preserved bow was found in Hedeby, the great Danish Viking town (now in Germany). It was made of yew wood. A rich boat-burial in Hedeby contained a bundle of arrows with bronze mounts. They probably belonged to a nobleman.



Bow made of flexible wood such as yew

Fur hat

Shaft of flexible birch wood

Flights, pieces of bird feather added to stabilize the arrow in the air

Sharp iron arrowhead

Bear-tooth pendant

Bowstring of twisted fibers

Bundle of arrows

Leather quiver, a pouch for holding arrows

Leather sheath for knife

Round shield

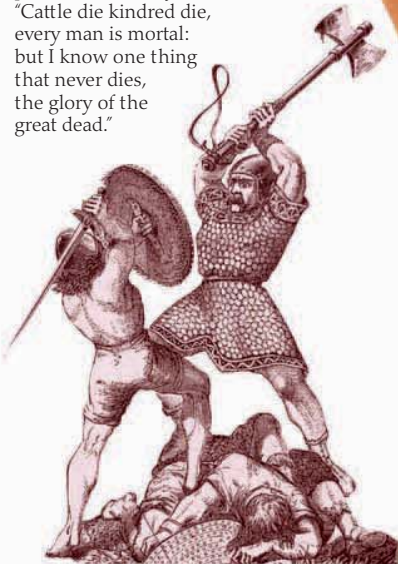
Sword

Conical helmet

Spear

BOUND FOR GLORY

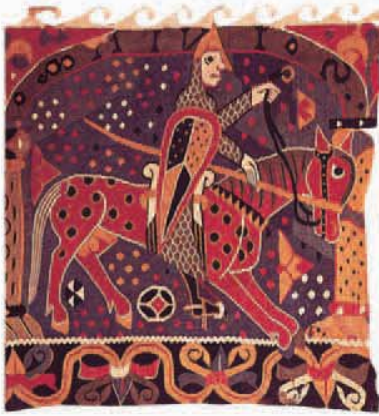
In this romantic engraving, warriors fight with ax and sword. The Viking poem *Hávamál* says: "Cattle die kindred die, every man is mortal: but I know one thing that never dies, the glory of the great dead."



STONE WARRIOR

This Viking warrior was carved in the 10th century on a stone cross in Middleton, Yorkshire, England. His weapons are laid out around him, as they would have been in a traditional burial (pp. 54–57). The Anglo-Saxon poem *The Battle of Maldon* describes the noise and fury of a battle between Danish Vikings and the English: "Then they let the spears, hard as a file, go from their hands; let the darts (arrows), ground sharp, fly; bows were busy; shield received point; bitter was the rush of battle."

Ax



THE LATEST FASHION
 Vikings usually fought on foot. Fashions changed in the late 11th century, at the end of the Viking Age, when cavalry began to be used in battle. This mounted warrior comes from a tapestry woven in Baldishol, Norway, in around 1200. He is wearing a helmet and chain-mail tunic, and carrying a kite-shaped shield. Against an opponent on foot, these longer shields gave better protection to the cavalryman's lower body.



ONE HEAVY SHIRT
 These fragments of a chain-mail shirt come from Gjermundbu, Norway. Making chain mail was a slow job. Each iron ring had to be forged separately. Then it was linked to the last one and closed with a rivet or welded in place. It took thousands of rings to make one shirt.

Sword guard to protect the hand

Chain-mail tunic, long enough to cover the waist

CASUAL DRESS
 Unlike Roman legionaries or modern soldiers, Viking warriors didn't wear uniforms. Every soldier had to dress and arm himself. Iron helmets were worn by chieftains, but poor warriors had to make do with leather caps, which didn't offer as much protection. Some warriors wore leather tunics instead of chain mail. Wooden shields were held up against arrows and blows from axes or swords.



Iron helmet with a nose guard

Wooden shaft

Chain mail to protect the neck

Brooch

Iron sword

Leather shoes, often made of goatskin

Sheath for sword

Tweed pants

Iron spearhead

Iron plates welded together

Chain mail may have hung from the back to protect the neck

REAL HELMET (NO HORNS)
 Viking helmets did not have horns. This example comes from Gjermundbu in Norway. It has a goggle-like eye guard.

Padded leather tunic

Baldric, a strap used to carry a sword

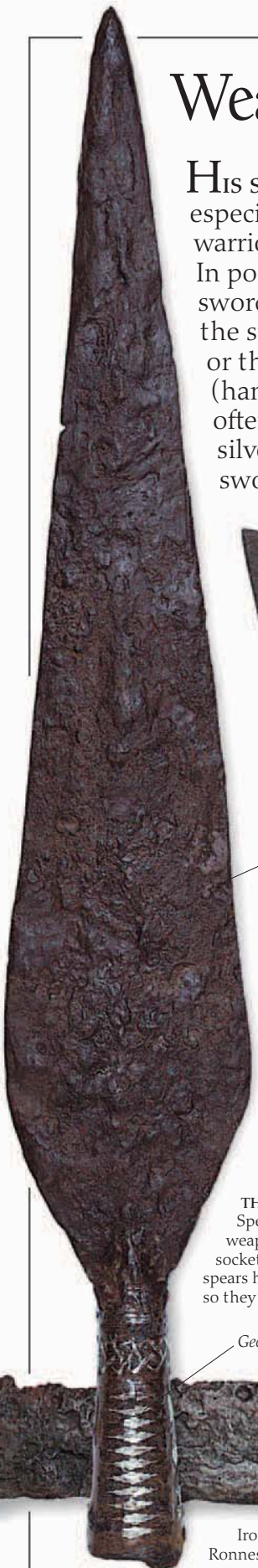
Wooden shield with an iron boss

Men probably wore long woolen socks

Weapons

HIS SPEAR, HIS AX, his shield, and especially his sword—these were a warrior's most prized possessions. In poems and sagas (pp. 50–51), swords were given names celebrating the strength and sharpness of the blade or the glittering decoration of the hilt (handle). Weapons were made of iron, often decorated with inlaid or encrusted silver or copper. A beautifully ornamented sword was a sign that the owner was rich or powerful. Before the arrival of Christianity, a Viking's weapons were usually buried with him when he died.

Helmets (p. 13) are rarely found, because most of them were made of leather and have rotted away.



Iron thrusting spearhead from Ronnesbæksholm, Sjælland, Denmark



Notch to cut feathers

Broad iron blade

ARROWS
Arrows were used for hunting as well as battle (p. 12). These iron arrow-heads from Norway were once lashed to birch-wood shafts. The two on the right were for hunting caribou; second from left is a general hunting arrow; the one on the far left was for killing birds.

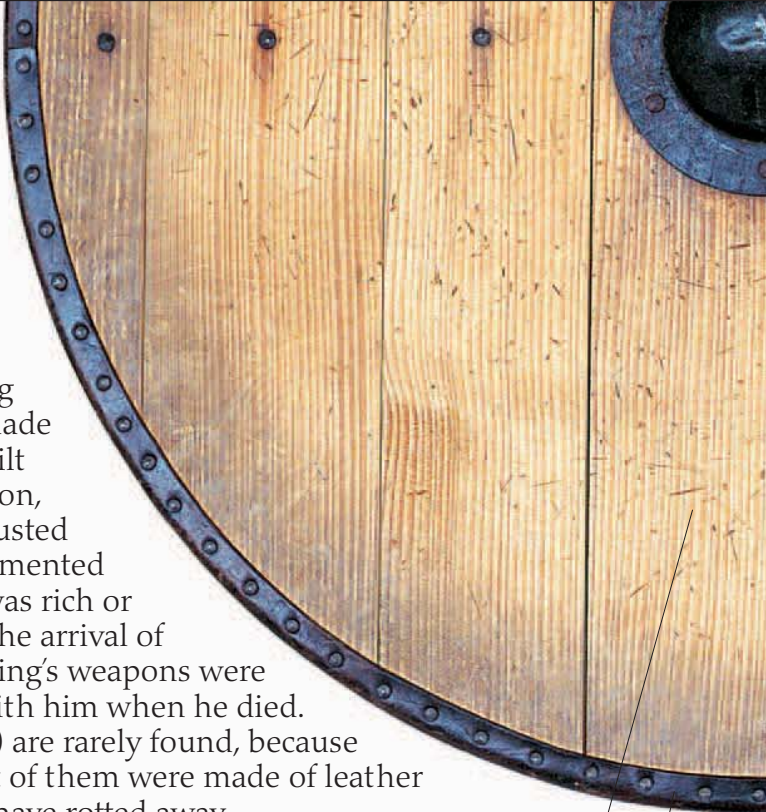
THRUSTING AND THROWING
Spears were used mainly as thrusting weapons and had large broad blades. The sockets were often decorated. Throwing spears had much lighter, narrower blades, so they would fly straight and true.

Geometric patterns of copper and silver

Wooden shaft was riveted into the socket



Iron throwing spearhead from Fyrkat fortress, Jutland, Denmark



Wooden board about 3 ft (1 m) in diameter

Leather binding to protect the edges



BERSERK

Tyr was the Viking god of war. In this romantic engraving, he has a shaggy bear-skin cloak, with the bear's head worn as a helmet. Warriors called *berserkir* prepared for battle by putting on bearskin cloaks or shirts and working themselves into a frenzy. This was called going berserk, from the Old Norse word meaning bear shirt.



SHIELD
 Viking shields were round and made of wood. Unfortunately, wood rots quickly, and very few shields have survived. This one is a replica based on fragments found with the Roskilde warship (pp. 10–11). The iron boss (knob) in the center protected the warrior's hand. He held the shield by a grip on the other side of the boss. Shields were often covered in leather or painted in plain colors. A Viking poem, *Ragnarsdrápa*, even describes a shield painted with pictures of gods and heroes.



Decorative knob

Geometric patterns of inlaid silver

AXES
 Axes with long wooden handles were the most common Viking weapon. T-shaped axes were usually used for working wood (p. 43). But the example on the right is so richly decorated that it must have been used as a weapon—and a symbol of prestige or power.

Hole for wooden handle, which has rotted away

Rounded pommel

Iron ax head from Fyrkat, Denmark

Broad iron blade

Iron ax head from Trelleborg, Denmark



CHAIN GANG

In this detail from the Bayeux Tapestry (p. 10), Norman warriors carry weapons and chain-mail suits to their ships. The suits of mail (p. 13) are so heavy that each one is carried on a pole between two men. This also stops the chain mail from getting tangled up. Viking weapons would have been similar to those shown above.

Straight guard

Grip

Pommel

Iron sword from Denmark



Double-edged sword from Bjørnsholm, Sønderø, Denmark

Hilt decorated with geometric patterns of silver and brass

DOUBLE-EDGED SWORDS
 Swords were usually double-edged. The smith (pp. 42–43) sometimes pattern-welded the blades for extra strength. He did this by fusing several strips of iron together. Then he twisted the metal, hammered it out, and polished it smooth. By adding carbon to the iron while it was red-hot, he produced sharp steel edges. Hilt and pommels were often highly decorated.

Pattern-welded iron blade

Fuller, a central groove that makes the sword lighter and more flexible

Terrorizing the west

THE VIKINGS SWEEP into western Europe, terrorizing towns along the coast, plundering churches and grabbing riches, slaves, and land. The first dated raid, on the famous monastery of Lindisfarne, England, in 793, shocked the whole Christian world. From then on, attacks all over Europe intensified. Bands of Viking warriors roamed the North Sea and the English Channel, raiding choice targets almost at will. Soon the Vikings were venturing farther inland. They sailed up the great

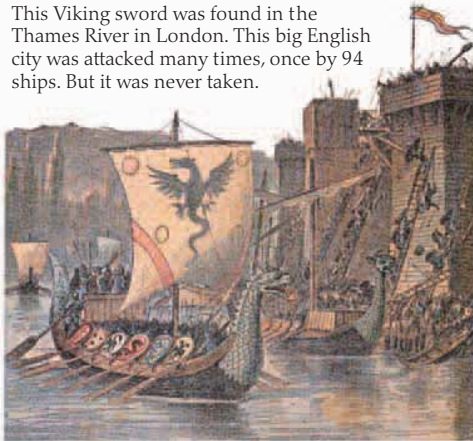


Animal-head lead weight made in Ireland

rivers of Europe—the Rhine, Seine, Rhone, and Loire—and even overran Paris, France. The raiders began to spend the winters in areas they had captured. Then they set up bases to attack other targets. The Vikings often demanded huge payments for leaving an area in peace. Some warriors spent many years raiding. Björn Jarnsitha and his companion Hasting spent three years with 62 ships in Spain, North Africa, France, and Italy. They lost a lot of their treasure in storms on the way home.

THROWN INTO THE THAMES

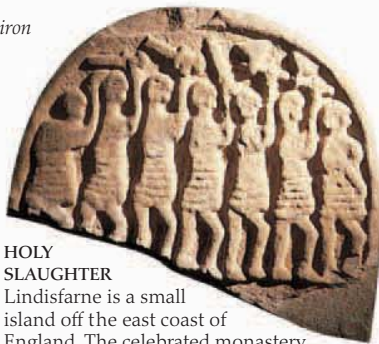
This Viking sword was found in the Thames River in London. This big English city was attacked many times, once by 94 ships. But it was never taken.



SOUVENIR OF PARIS

Paris was conquered on Easter Sunday, March 28, 845. Charles the Bald, the French king, had to pay the raiders 7,000 lb (3,150 kg) of silver to get peace. The Viking leader Ragnar even took a bar from the city gate as a souvenir. But he and most of his men died of disease on their way back to Scandinavia.

Rusted iron blade

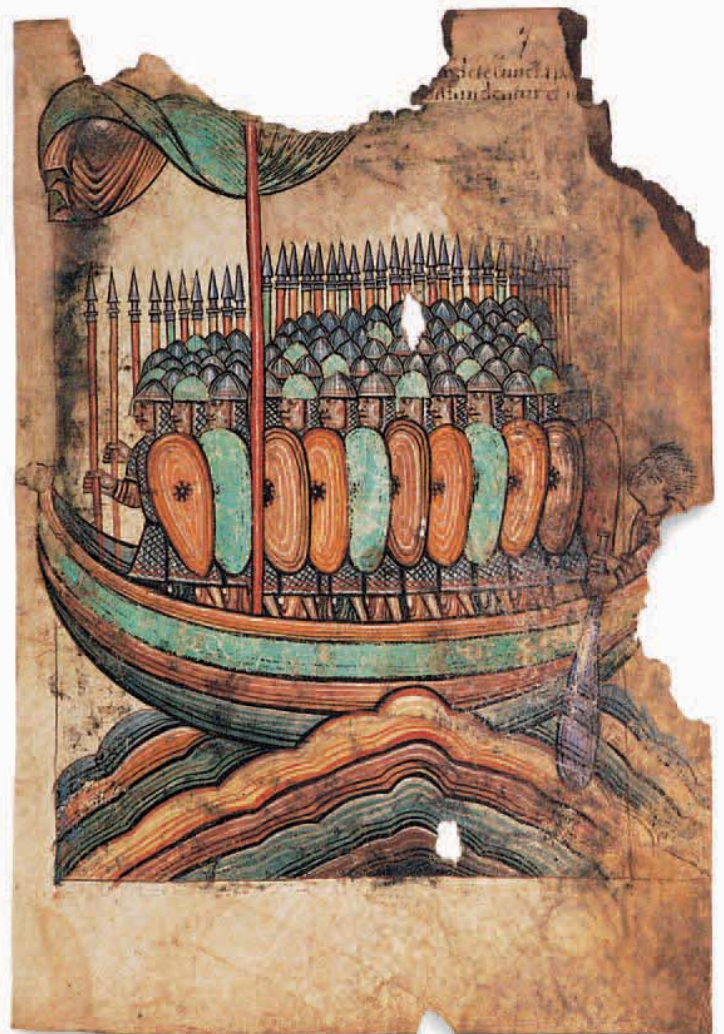


HOLY SLAUGHTER

Lindisfarne is a small island off the east coast of England. The celebrated monastery there was destroyed by Vikings in 793. These warriors carved on a stone from the island may well be the Viking raiders. The *Anglo-Saxon Chronicle*, a contemporary English historical record, reported: "The ravages of heathen men miserably destroyed God's church on Lindisfarne, with plunder and slaughter."

RAIDING FRANCE

This picture of a Viking ship is in a French manuscript from around 1100. Viking ships attacked French towns and monasteries all through the 9th century. One group of Vikings settled in the Seine region. Another band, under the chieftain Rollo, made their homes around Rouen. This area became known as Normandy, "Land of the Northmen."



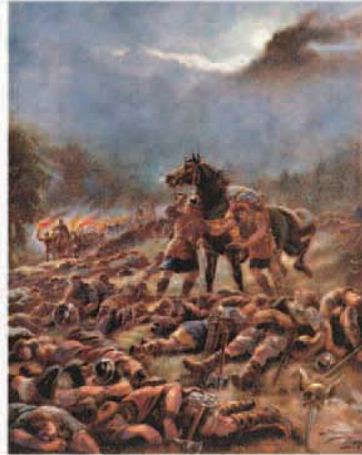


KILLING THE KING
 King Edmund was king of East Anglia in England in 869. This 12th-century manuscript shows him being beaten by Vikings. Then they tied him to a tree and shot him full of arrows. Edmund still refused to give up his belief in Christ, so they cut off his head. The Vikings later settled in East Anglia under their leader King Guthrum.



Interlace designs, typical of Dublin Viking art

IRISH CROOK
 Raids on Ireland began in 795. By the 820s, the Vikings had worked their way around the entire island. The town of Dublin became a thriving Viking trading center with links to many other countries. This wooden animal head comes from a crook or walking stick. It was made in Dublin, but it is decorated in the Viking Ringerike style. It dates from early in the 11th century.



SCOTCHED
 This imaginary scene depicts the Viking invasion of Scotland. Many of the raiders were Norwegians who came via the Shetland and Orkney Islands. From these resting places, the many Hebridean islands, the Isle of Man, and Ireland were all within easy reach.



Hollow box of yew wood covered in plates of tin and copper mixed with other metals

DEATH OF THE ARCHBISHOP
 In 1012, Archbishop Alphege of Canterbury was seized by Vikings who were raiding the English countryside. They were angry because the English King Ethelred had not paid them quickly enough. Alphege refused to be ransomed. The Vikings, who were drunk, pelted him with bones and cattle skulls. He was finally killed with a battle ax.

Small pieces of red enamel

Whole casket is shaped like a house



RANVAIK'S SHRINE
 This shrine, or casket, was made in Scotland or Ireland in the 8th century. It held holy Christian relics. It was probably taken to Norway as loot. There the new owner inscribed a message in runes (pp. 58–59) on the bottom: "Ranvaik owns this casket."

East into Russia



VIKING GRAFFITI

This stone lion once stood in the Greek port of Piraeus. A Viking traveler inscribed it with long, looping bands of runes, Scandinavian writing (pp. 58–59). Such graffiti is often the only evidence of where Vikings traveled. Much later, in 1687, Venetian soldiers carried the lion off to Venice. The runes have eroded too much to be read today.

TO CROSS INTO RUSSIA, Viking warriors and traders sailed up various rivers such as the Dvina, Lovat, and Vistula in Poland. Then they had to drag their boats across land before they reached the headwaters of the Dniepr, Dniester, and Volga rivers and followed them south to the Black and Caspian seas. From there, the great cities of Constantinople (heart of the Byzantine empire) and Baghdad (capital of the Islamic Caliphate) were within reach. The history of Viking raids in the east is not as well recorded as in western Europe. In about 860, a group of Swedish Vikings under Rurik settled at Novgorod. After Rurik's death, Oleg captured the town of Kiev. He established an empire called Kievan Rus, which would later give rise to the medieval czardom of Russia.



TREE OF LIFE

An Oriental tree of life is etched on the surface of this silver locket. It may have been an amulet, perhaps full of strong-smelling spices. The locket was found in a grave in Birka, Sweden. But it was probably made in the Volga area of Russia, or even as far south as Baghdad.



Silver loop for a chain

EASTERN FASHIONS

Gotland is an island in the Baltic Sea. Gotland Vikings traveled far into Russia, and their excellent craftsmen often adopted styles from the east. These beads and pendant are made of rock crystal set in silver. They were probably made in Gotland, where they were found. But the style is distinctly Slav or Russian.

High-quality rock crystal shaped like a convex lens

CHECKERED PAST

This silver cup was made in the Byzantine Empire in the 11th century. It was taken back to Gotland by Vikings, who added a name and a magical inscription on the bottom in runes. The cup was buried around 1361 and found by ditch-diggers in 1881.



SWEDISH VIKINGS

Most of the Vikings who traveled to Russia and the east were Swedish. Of more than 85,000 Arab coins found in Scandinavia, 80,000 were found in Sweden. Many 11th-century Swedish rune stones tell of voyages to the south and east. They record the deaths of travelers in Russia, Greece, the Byzantine Empire, and even Muslim lands. Most Viking settlements were temporary trading stations. Others, like Kiev and Novgorod, were more permanent. A sign of this is that women lived there, too.



Birds, leaves, and winged lions



Fur hat

Fighting ax with a long wooden handle

Long knife in a leather sheath

Woolen tunic with an embroidered border

Baggy pants in the eastern fashion

Knee-high leather boots

Wooden shield

Sword



GOING OVERLAND

The Russian rivers were full of rocks and rapids. The Vikings dragged or carried their light boats around these dangers. Not everyone made it. Swedish memorial stones record the deaths of many travelers in Russia and lands beyond.

A WELL-ARMED RUS

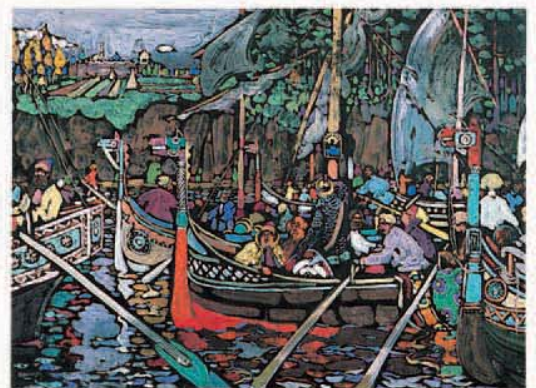
In the east, Vikings were called *Rus* by the local people.

This is probably where the word Russia comes from. Arab writers describe Viking traders armed with swords and carrying furs of black fox and beaver. The Arab Ibn Fadhlān (pp. 47, 55) said the *Rus* he met in 922 were "the filthiest of God's creatures." He noted with disgust that they all washed in the same bowl of water, rinsing their hair, blowing their noses, and spitting in it before passing it on to someone else!



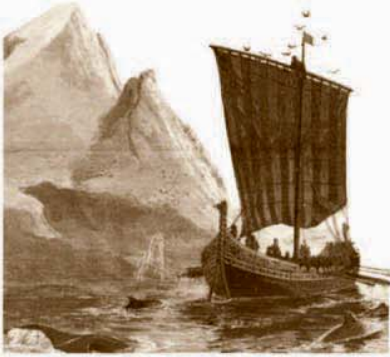
VIKING CHURCH

The cathedral of Saint Sofia at Novgorod dates from the mid-11th century. It replaced an earlier church built in 989, just after Prince Vladimir, the ruler of the Vikings in the area, ordered his people to become Christians. The onion-shaped domes are a common feature of Russian churches.



SONG OF THE VOLGA

This is *Song of the Volga* by the Russian painter Wassili Kandinsky (1866–1944). The Volga River flows across Russia all the way to the Caspian Sea. Viking traders sailed up it in ships heavy with Arab silver. They had to pay taxes to the Bulgars and Khazars, who lived along its banks.



GREEN AND RED
A man named Gunnbjörn found Greenland after his ship was blown off course in a storm. The huge island was explored in 984 and 985 by Erik the Red, a chief who had been accused of murder and forced to leave Iceland. Erik encouraged hundreds of Icelanders to settle in Greenland.

Discovering new lands

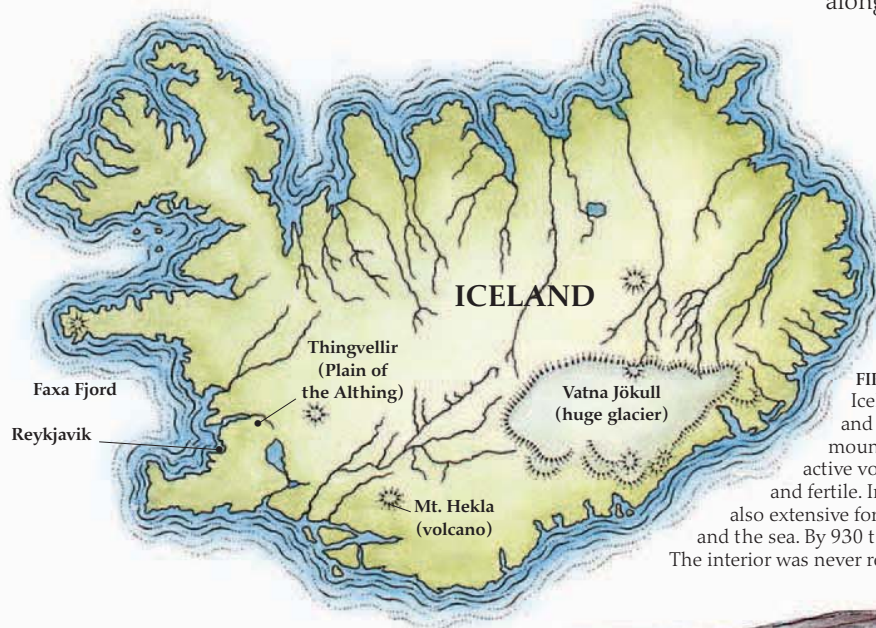
THE VIKINGS WERE DARING EXPLORERS. In search of new land, they sailed their slender ships into the frozen, uncharted waters of the North Atlantic. Most of the explorers came from Norway, where the valleys were crowded and farmland was scarce. They discovered the Faroe Islands and Iceland, as well as far-off Greenland and the land they called Vinland (North America). As reports of these exciting discoveries got back to Scandinavia, ships full of eager settlers set sail. Between 870 and 930, for example, more than 10,000 Vikings arrived in Iceland. They found empty spaces, wild forests, and seas teeming with fish. The sea voyages were long and dangerous, and many ships sank in storms. But the urge to travel to new lands remained strong.



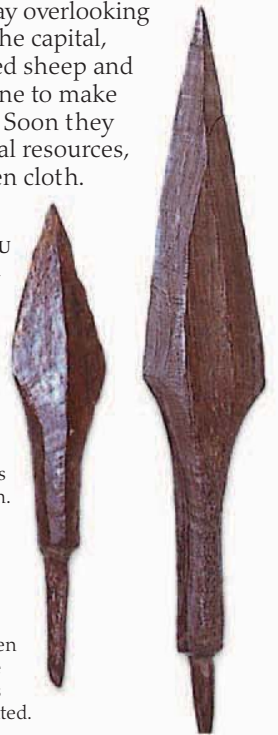
MEETINGS IN THE PLAIN
In southwestern Iceland is a high plain surrounded by cliffs of lava. This plain, called Thingvellir, was chosen as the site for the Althing, Iceland's governing assembly, which met once a year in the open air. The Althing is thought to have first met in 930.

Iceland

Iceland is a volcanic island that was first colonized in 870. In good weather it took seven days to get there from Norway. The first settler was Ingolf, from Sunnfjord, Norway. He built a large farm on a bay overlooking the sea. This later became the capital, Reykjavik. The settlers raised sheep and used local iron and soapstone to make weapons and cooking pots. Soon they were exporting these natural resources, along with woolen and linen cloth.



CARIBOU KILLS CARIBOU
These arrowheads from Greenland are carved from caribou antler. Iron was very scarce, so weapons had to be made from the materials on hand. Caribou were a major source of food, and the settlers may have used these arrows to hunt them.



FIRE AND ICE LAND
Iceland's interior is harsh and inhospitable, with jagged mountains, glaciers, and several active volcanoes. But the coast is green and fertile. In the Viking Age, there were also extensive forests between the mountains and the sea. By 930 the coast was densely populated. The interior was never really inhabited.

HELGE'S ANIMALS
This elegant piece of carved wood was discovered in the ruins of a house in Greenland. It dates from the 11th century. It may be the arm of a chair, or a tiller used to steer a boat. The surface is carved with animals with big eyes that look like cats. A runic inscription at the end probably proclaims the owner's name, Helge.



North America

Leif the Lucky, Erik the Red's son, explored land in North America during a trip from Greenland (another account says that Bjarni Herjolfsson reached the coastline a few years before). Around 1001, Leif became the first European to set foot in North America, probably in Newfoundland, Canada. He called it Vinland (Wine Land), perhaps mistaking the big huckleberries he saw for red grapes. The Vikings also discovered Markland (Wood Land) and Helluland (Rock Land). These may be Labrador and Baffin Island to the north.



Modern tapestry showing Leif the Lucky sighting Vinland



EXPLORING THE FROZEN NORTH

This rune stone was found at Kingiktorsuak, Greenland, at latitude 73° north. It proves that settlers explored the frozen north of the island. The stone was carved in around 1300. Around 100 years after this date, the last descendants of the Vikings in Greenland perished.



VIKINGS IN VINLAND

Evidence of Viking settlements in North America includes one located at L'Anse aux Meadows in Newfoundland, and one to the north on Ellesmere Island. Large houses with thick turf walls have been unearthed, and objects such as a dress pin, a spindle whorl (p. 44), and a coin have been found. The Vikings may have sailed farther south along Nova Scotia, perhaps as far as New England, but there is no firm evidence of this.



GREENLAND INUIT

The Inuit (Eskimos) made everything they needed from the natural resources of the land and sea. But the Vikings had to import lumber, iron, and grain to survive.

Greenland

Most of this inhospitable island is covered in ice and snow. Erik the Red called it Greenland to encourage people to move there. The Vikings established two settlements, the eastern and western settlements, in the only areas where the land could be farmed. They built their farms on the edges of fjords, often far inland. They farmed sheep and cattle, but depended mainly on caribou and seals for food.



WHALEBONE AX

The Inuit in Greenland made weapons from the bones of seals, whales, and caribou. This whalebone ax head from a Viking farm shows that the Vikings did the same. Its shape is very similar to iron ax heads (p. 15), but it wouldn't have been as strong. It is probably a toy made for a child.

Animal head

Animal with gaping jaws and huge teeth



A Viking fort

THE VIKINGS BUILT FOUR great circular forts in Denmark. Two of them, at Aggersborg and Fyrkat, are on the Jutland peninsula. The other two are at Trelleborg, on the island of Sjælland, and Nonnebakken, on the island of Fyn. It used to be thought that King Svein Forkbeard built them as military camps for launching his invasion of England in 1013. But dendrochronology (tree-ring dating) has proved that the forts were built earlier, around 980. It is now thought that King Harald Bluetooth had them constructed to unify his kingdom and strengthen his rule. Bones dug up in cemeteries outside the ramparts prove that women and children lived there as well as men. Some of the fort buildings were workshops, where smiths forged weapons and jewelry from gold, silver, and iron.

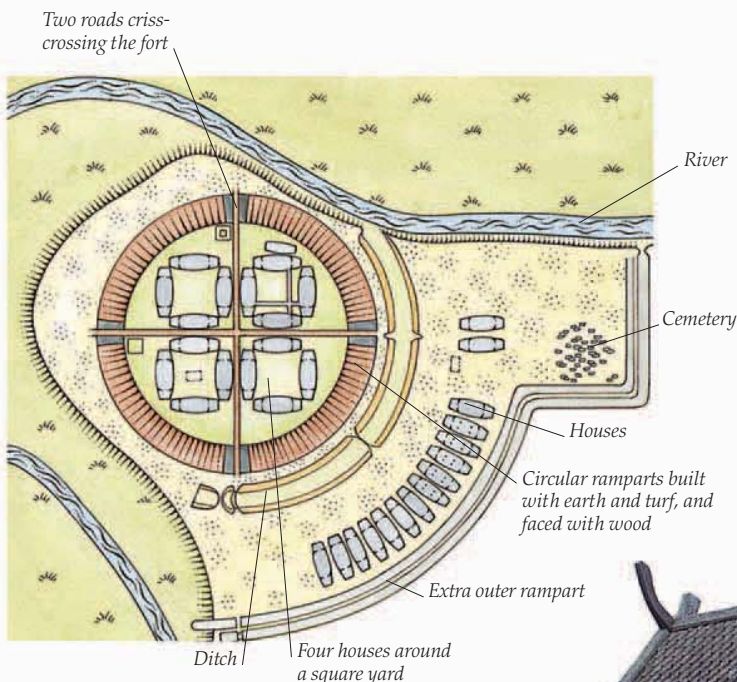


THE WALLS GO UP

The first step in building a fort was clearing the land and preparing the timber. This detail from a 15th-century Byzantine manuscript shows Swedish Vikings making the walls of Novgorod, Russia, in the 10th century.



Aerial photograph of the site of the Trelleborg fortress



Layout of the Trelleborg fortress

TRELLEBORG

The forts had a strict geometrical layout. Each one lay within a high circular rampart—a mound of earth and turf held up by a wooden framework. This was divided into four quadrants by two roads, one running north-south, the other east-west. Four long houses sat in a square in each of the quadrants. The roads were paved with timber. Covered gateways, which may have been topped with towers, guarded the spots where the roads met the rampart. The largest fort, Aggersborg, was 790 ft (240 m) in diameter. Trelleborg was much smaller, 445 ft (136 m) across. Trelleborg is unusual because 15 extra houses were built outside the main fort. These were protected by their own rampart. All four forts were built on important land routes, possibly so that King Harald could keep an eye on the area in case of rebellion.

TRELLEBORG HOUSE, SIDE VIEW

The buildings at the forts were made of wood, which rotted away a long time ago. All that is left are ghostly outlines and black holes where the posts once stood. This replica of a house was built in 1948. It is 96 ft 5 in (29.4 m) long. The elegant, curving roof is said to be hog-backed in shape. House-shaped gravestones and caskets from England give an idea of how it once looked. Experts now believe that there was only one roof, which reached all the way down to the short outer posts.





Iron blade, badly rusted now

Silver, inlaid in geometric patterns

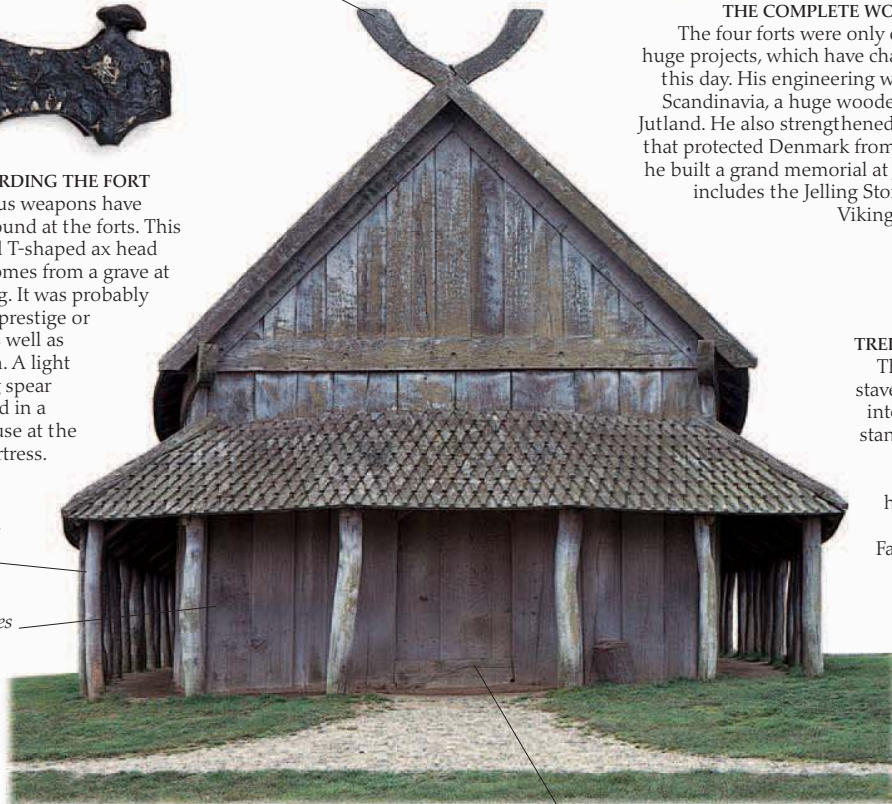
GUARDING THE FORT
 Various weapons have been found at the forts. This beautiful T-shaped ax head (p. 15) comes from a grave at Trelleborg. It was probably a sign of prestige or power, as well as a weapon. A light throwing spear was found in a guardhouse at the Fyrkat fortress.



THE COMPLETE WORKS OF HARALD BLUETOOTH

The four forts were only one of King Harald Bluetooth's huge projects, which have changed the Danish landscape to this day. His engineering works include the first bridge in Scandinavia, a huge wooden structure at Ravning Enge in Jutland. He also strengthened the Danevirke, a massive wall that protected Denmark from invasion from the south. And he built a grand memorial at Jelling in Jutland (above). This includes the Jelling Stone, the biggest and grandest of Viking memorial stones (pp. 60-61).

Projections called finials decorate the gables



TRELLEBORG HOUSE, FRONT VIEW

The houses were built of upright staves (wooden planks) set straight into the earth. They all followed a standard pattern. The main door at each end opened into a small room. These led in turn into a huge central living room, where a big fire always burned. Farmhouses like those excavated at Vorbasse in Jutland have a similar layout. The wood must have rotted quickly, and there is no evidence of repairs. The forts were probably only inhabited for a few years. King Harald was killed in battle in 986. Soon after this date, the forts he had built were abandoned and left to rot.

Sturdy wooden posts hold up the roof

Walls made of staves

Main door

Smoke hole over the fire, which burned in a hearth in the middle of the central living room

Roof is covered in overlapping shingles (wooden tiles)



Finials



BRONZE-AGE BOATS

Rock carvings in Sweden and Norway show boats from as early as 1800 BCE. Sails were developed in Scandinavia just before the Viking Age, around 700 CE. Before then, all ships were rowed.

Other ships

THE VIKINGS BUILT SHIPS and boats of many shapes and sizes, suited to different waters and uses. They were all variations on the same design, with overlapping strakes (planks), a keel, and matching prow and stern. Only the longest, fastest vessels were taken raiding. Cargo ships were slower and wider, with lots of room for storing goods. Other boats were specially made for sailing in narrow inlets and rivers, following the coast, or for crossing oceans. There were fishing boats, ferries for carrying passengers across rivers and fjords, and small boats for traveling on lakes. Small rowing boats were also carried on board larger boats.



LEIF SIGHTS NORTH AMERICA

Explorers sailed wide-bodied, sturdy ships. These were much heavier than warships and had more space for passengers and their belongings and supplies. In this dramatic interpretation of Leif the Lucky's voyage to North America (p. 21), Leif is shown pointing in wonder at the new continent. His other hand holds the tiller. The raised deck at the stern (back) can be clearly seen. Leif was Erik the Red's son (p. 20), and is also known as Leif Eriksson.



Steering oar

ROWING BOAT

Rowing boats were made just like miniature ships. This is a replica of one of the three small rowing boats buried with the Gokstad ship (pp. 8–9). It had two pairs of slender oars and a stubby steering oar.

Two sets of oars

Hole for rope

CARGO SHIP

This is the prow of one of the five ships from Roskilde Fjord, Denmark (pp. 10–11). It is a merchant ship, 45 ft 3 in (13.8 m) long and 10 ft 10 in (3.3 m) wide, and probably made locally. It could carry five tons of cargo. This was stowed in the middle of the ship and covered with animal hides to protect it from the rain. The crew could still steer and work the sail from decks at the prow and stern. The ship may have belonged to a merchant who sailed along the coast to Norway to pick up iron and soapstone and across the Baltic Sea in search of luxuries, such as amber.



Forward oarport (hole for oar)

Gunwale (top strake)

A copy of the prow (below) in place

Overlapping strakes held together with iron nails or clench-bolts

The lines of the strakes are continued in elegant carvings on the prow

CARVED PROW

The cargo ship above is put together with great skill. The shipbuilder carved the entire prow from a single piece of oak. The keel was made first. Then the prow and stern were nailed to the keel. Finally, the strakes (planks) and deck boards were installed.

DROPPING ANCHOR

Every ship needs an anchor. The anchor of the Oseberg ship (pp. 54–57) was solid iron with an oak frame. It weighed 22 lb (10 kg). This stone anchor comes from Iceland.



ROAR EGE, FRONT VIEW

Named *Roar Ege*, this is a replica of the merchant ship from Roskilde on the previous page. It was specially built to see how much cargo the ship could hold and how many men were needed to sail it. The ship has oars, but the crew of four to six only use them for maneuvering in tight spots. Usually, they rely on a large sail. In good winds, *Roar Ege* averages 4 knots (4.5 mph/ 7.5 kph) and has reached 8 knots (9 mph/ 15 kph). The ship was ideally suited to sailing in the Baltic Sea and Danish coastal waters. The original may have been taken up rivers or into the North Sea.



THE OSEBERG SHIP

One of the most beautiful Viking vessels is the Oseberg ship (pp. 54–57). It was not as sturdy as the Gokstad ship and was probably built to cruise coastal waters. This is a scene from the ship's excavation.



STRAKE NAILS
Iron nails held the strakes together. Often they are all that is left of a ship once the wood has rotted away.



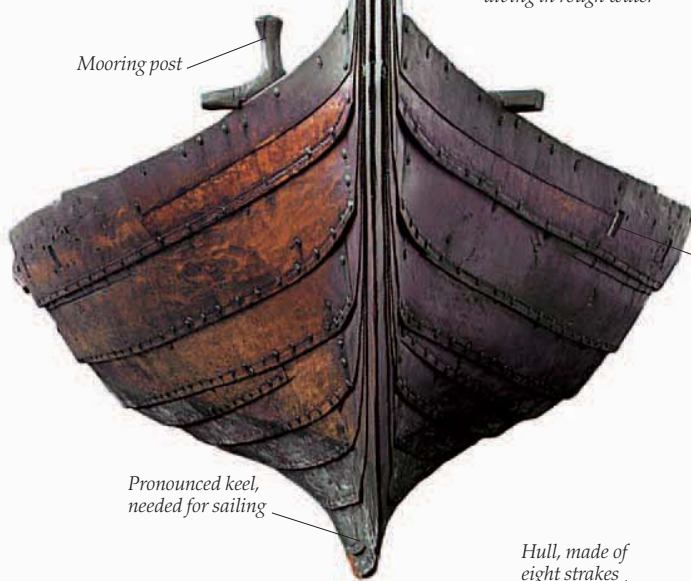
SETTLERS' VESSEL

This is a model of a sturdy cargo ship with a square sail and shrouds (ropes) securing the mast. Ships like this carried settlers to Iceland and Greenland.



OUT OF TUNE

The remains of another large ship were found at Tune, across the Oslo Fjord from the Gokstad and Oseberg ship mounds. The Tune ship is built of oak, with a pine steering oar and cross-beams. It was about 65 ft (20 m) long, a little shorter than the Gokstad ship.



Mooring post

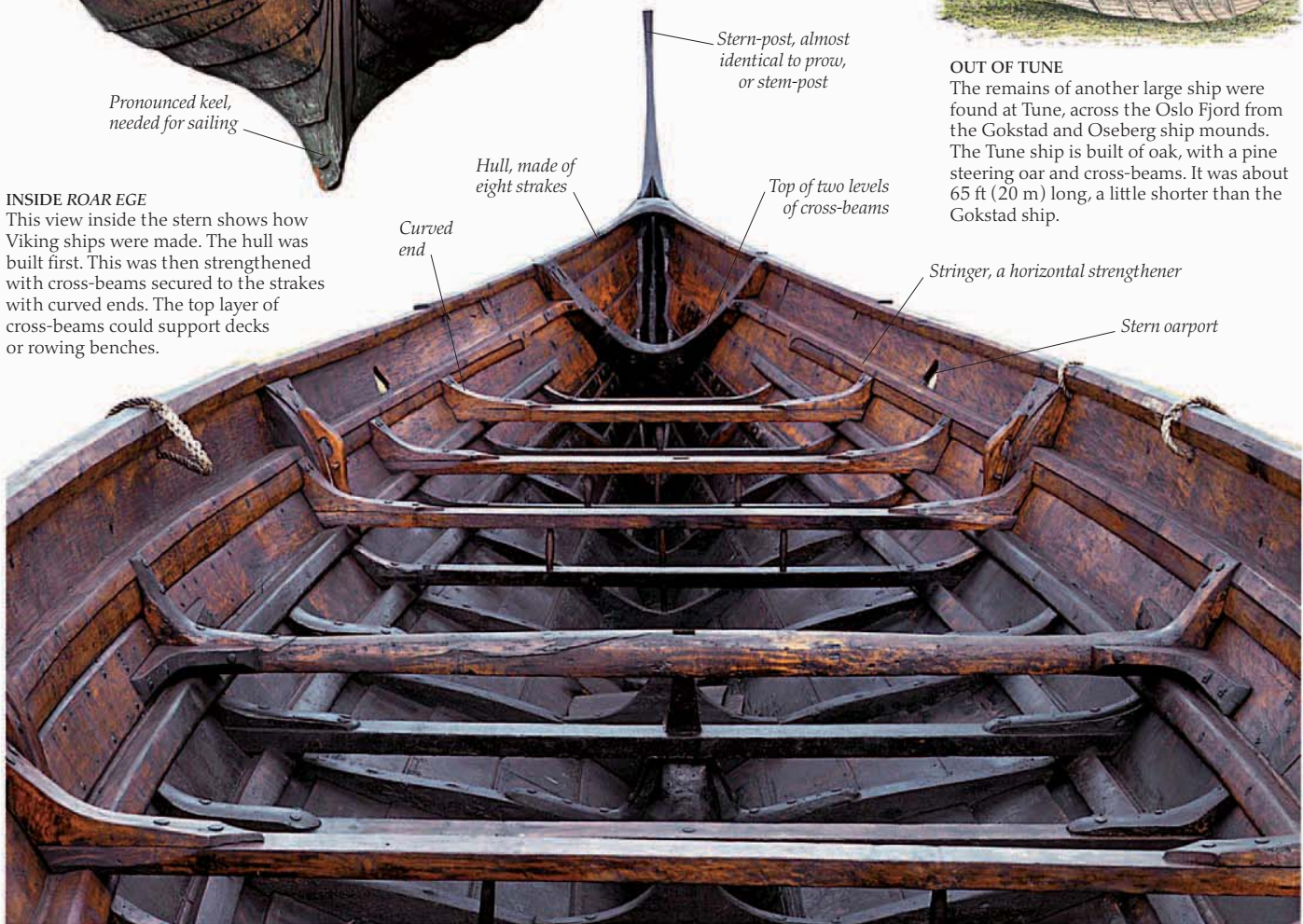
High prow stops the ship from nose-diving in rough water

Pronounced keel, needed for sailing

Each side has three oarports, two near the prow and one at the stern

INSIDE ROAR EGE

This view inside the stern shows how Viking ships were made. The hull was built first. This was then strengthened with cross-beams secured to the strakes with curved ends. The top layer of cross-beams could support decks or rowing benches.



Stern-post, almost identical to prow, or stem-post

Hull, made of eight strakes

Top of two levels of cross-beams

Curved end

Stringer, a horizontal strengthener

Stern oarport

Trading east and west



THE VIKINGS WERE GREAT TRADERS who traveled far beyond Scandinavia buying and selling goods. The riches of the north included lumber for shipbuilding; iron for making tools and weapons; furs for warm clothing; skins from whales and seals for ship ropes; and whalebones and walrus ivory for carving. These were carried to far-flung places and exchanged for local goods. The traders returned from Britain with wheat, silver, and cloth, and brought wine, salt, pottery, and gold back from the Mediterranean. They sailed across the Baltic Sea and upriver into Russia, then continued on foot or camel as far as the cities of Constantinople (now Istanbul) and Jerusalem. In markets all along the way, they haggled over the price of glass, exotic spices, silks, and slaves.



THE SLAVE TRADE
Some Vikings made their fortunes trading slaves. They took many Christian prisoners, like this 9th-century French monk. Some slaves were taken home for heavy farm and building work. Others were sold for silver to Arab countries.

Markets and towns grew as centers for trade. Big Viking market towns included Birka in Sweden, Kaupang in Norway, Hedeby in Germany (at the time in Denmark), York in England, Dublin in Ireland, and Kiev in Ukraine.



Die for striking (making) coins, found at York, England



Three early Danish coins

Coin from England

THE COMING OF COINS

Coins only became common toward the end of the Viking Age. Before then, they used pieces of silver and other people's coins, or traded by bartering—swapping for items of similar value. The first Danish coins were struck in the 9th century. Not until 975, under King Harald Bluetooth, were coins made in large numbers.



RHINE GLASS

Only rich Vikings drank from glass cups. Many have been found in Swedish graves. This glass must have been bought or stolen in the Rhineland, in modern Germany.

MADE IN ENGLAND?

One of the many beautiful objects found with the Oseberg ship (pp. 54–57) was this unusual bucket. Attached to its handle are two brass figures with crossed legs that look just like Buddhas. But the Vikings were not Buddhists, and the craftsmanship suggests that the figures were made in England. So how did the splendid bucket end up in a queen's grave in Norway? It must have been traded and brought back from England.

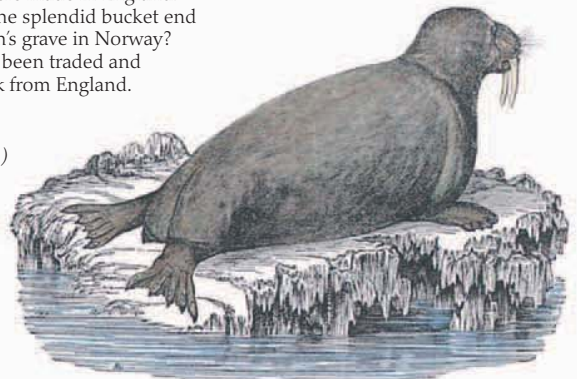
Brass Buddha-like figure

Colorful enamel



Staves (planks) of yew wood

Band of brass



TUSK, TUSK

The Vikings hunted walrus for their hides, which were turned into ship ropes. The large animals were skinned in a spiral, starting from the tail. Traders also sold the animal's ivory tusks, either unworked or beautifully carved.

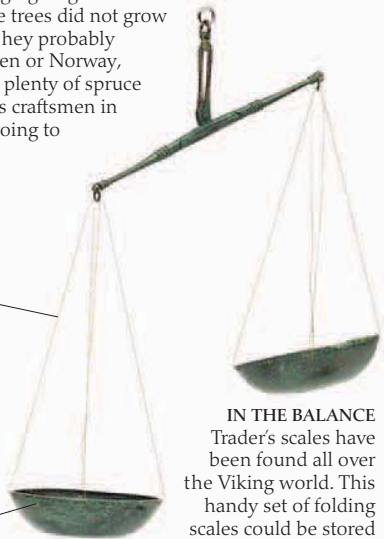


Spruce-wood stick

Twelve unfinished iron ax heads

GETTING THE AX

These unfinished ax heads were found on a Danish beach. They may have been washed ashore from a wrecked trading ship bringing cargo to Denmark. Spruce trees did not grow in Denmark, so they probably came from Sweden or Norway, where there was plenty of spruce and iron. Perhaps craftsmen in Denmark were going to finish the axes.



Copper wire

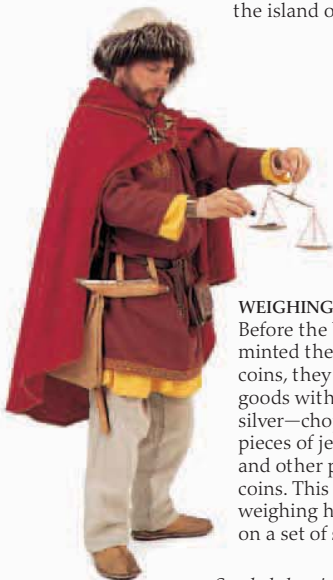
Bronze bowls

IN THE BALANCE

Trader's scales have been found all over the Viking world. This handy set of folding scales could be stored in a small bronze case when not in use. It was found on the island of Gotland in Sweden.



Bronze case for set of scales



WEIGHING SILVER

Before the Vikings minted their own coins, they bought goods with hack silver—chopped up pieces of jewelry and other people's coins. This trader is weighing hack silver on a set of scales.

Symbol showing weight



TRADER'S WEIGHTS

These five weights from Hemlingby in Sweden seem to form a complete set. Each one is stamped with a different number of tiny circles. These probably represent their weight, from half an *øre* to 1, 3, 4, and 5 *ortogar*. One *ortogar* was equivalent to 3 *øre*, or around 1/4 oz (8 g).

Warm wool cloak

Thor's hammer

Fur hat

Brooch to hold the cloak in place

Cross

Amber beads used in jewelry

Knife in leather sheath



Long wool tunic with embroidered borders

Pants of woolen cloth

VIKING TRADER

This trader is selling amber, which is the fossilized resin of trees. Amber was one of Scandinavia's biggest exports. It was traded as beads or in its natural state. Many traders converted to Christianity to make dealings with Christian countries easier. But they often kept faith with pagan gods as well, to make extra sure of protection. This trader wears both a Christian cross and a hammer, the symbol of the god Thor (pp. 7, 52–53).

Iron with brass coating

Leather shoes, laced up around the ankle

Kings and freemen



WELL-GROOMED
The well-off Viking warrior or chieftain took pride in his appearance. This Viking carved from elk antler has neatly trimmed hair and beard.

VIKING SOCIETY HAD THREE CLASSES—slaves, freemen, and nobles. Most of the hard labor was done by slaves, or *thralls*. Many were foreigners captured in war. Wealthy people sometimes had their slaves killed and buried with them. Slaves could be freed. Freemen included farmers, traders, craftsmen, warriors, and big landowners. At the beginning of the Viking Age, there were many local chieftains (nobles) who ruled over small areas. They were subject to the rule of the

Thing, the local assembly where all freemen could voice their opinions and complain about others. But chieftains and kings gradually increased their wealth and power by raiding and conquering foreign lands. By the end of the Viking Age, around 1050, Norway, Denmark, and Sweden were each ruled by a single, powerful king, and the role of the Things had declined.

PEASANT WARRIOR
This peasant was not rich, and dressed simply. But he was a freeman, and owned his own farm, which his wife would look after when he went to war. The 10th-century poem *Rígsthula* describes a peasant couple: he makes furniture and his wife weaves. They have a son named Karl, meaning farmer or freeman. Karl's wife wears fine goatskin and carries keys, a symbol of her status (p. 33).



Simple leather belt
Wooden ax handle
Plain iron ax head
Wooden shield with iron boss
Plain woolen pants
Leather shoes
Goatskin
Toggle (fastener) made of antler

BEST FOOT FORWARD
Rich or poor, leather shoes were of a simple design. Fancy pairs had colored uppers, ornamental seams, or even inscriptions. The most common leather for shoes was goatskin.

FIGHTING IT OUT
This is the *Duel at Skiringsal*, painted by the Norwegian artist Johannes Flintoe in the 1830s. Disputes were often settled by a duel, which could end in death. These gruesome fights were forbidden by law in Iceland and Norway in around 1000. Arguments could also be sorted out by the Thing (the local assembly), or by tests called ordeals. In ordeals, men would try to prove their innocence by picking stones from a cauldron of boiling water or carrying a hot iron for nine paces. The Vikings believed that the gods would protect the innocent.



FANCY HAT

The rich wore expensive clothes and imported jewelry. These parts of an elaborate cap were made in Kiev, Ukraine, and worn by a nobleman in Birka, Sweden.

Silver cap mount



Silver tassels

Braids for fastening cloak

Wool tunic embroidered with animals and faces

Fur trim

Cloak of dyed wool



TO CAP IT OFF

This silk cap was worn by a rich man or woman in the Viking town of York, England. The silk may have been imported from the faraway city of Constantinople.

Embroidered human faces



Bronze brooch for holding a cloak in place

Tunic was often worn over a linen undershirt

Dyed woolen pants



Bronze belt buckle

BROOCHES AND BUCKLES

All Viking men wore brooches and buckles to fasten their clothes. But the richer they were, the more ornate their brooch or buckle. These examples come from Gotland, Sweden.

MAMMEN CHIEFTAIN

Fine clothes, tablecloths, white bread, and silver cups were all signs of nobility. This man is wearing a reconstruction of clothes found in a nobleman's grave in Mammen, Denmark. They are made of high-quality wool and silk, decorated with embroidered borders and even gold and silver thread. The noble couple in the 10th-century poem *Rigsthula* have a son named Jarl, which means earl. He owns land, rides horses, and can read and write runes (pp. 58–59). His wife Erna is slender and wise. Their youngest child is named Konr ungr, which means king.



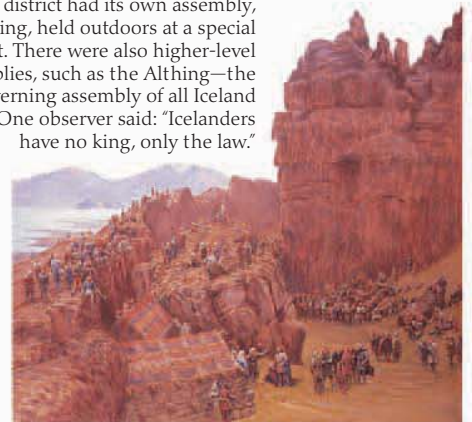
BORDER FACES

The border of the Mammen cloak was a panel of silk embroidered with human faces. No one knows whose faces they are. But the silk was imported, and the beautiful decoration shows how wealthy the man was.

ASSEMBLIES

Each district had its own assembly, or Thing, held outdoors at a special spot. There were also higher-level assemblies, such as the Althing—the governing assembly of all Iceland (p. 20). One observer said: "Icelanders have no king, only the law."

19th-century painting of the Althing, Iceland



Women and children



BRYNHILD

This is a romantic engraving of Brynhild. According to legend, she was a Valkyrie, a female warrior in the service of the god Odin (p. 53). In reality, there is no evidence that any Viking women were warriors, or even traders or craftsmen. But one female *scald* (poet) and a female rune carver are known.

VIKING WOMEN WERE INDEPENDENT. While the men were away on expeditions, women ran households and farms. A woman could choose her own husband, and could sue for divorce if he beat her or was unfaithful. On rune stones (pp. 58–59), women were praised for their good housekeeping or skill in handiwork such as embroidery. Wealthy women often paid for memorial stones to be raised for loved ones. Viking children didn't go to school. Instead, they worked in the fields and workshops, and helped with cooking, spinning, and weaving. Not all women and children stayed at home. Many joined their husbands or fathers in colonies such as England. They hid somewhere safe during battles, and came out later to help set up new villages.



TOY HORSE

About 900 years ago, a small boy or girl in Trondheim, Norway, played with this toy horse made of wood. Children also had toy boats. They played board games and made music with small pipes (p. 50). In the summer, young Vikings swam and played ball; in the winter, they skated and played in the snow.



Two carved animal heads with open jaws

BONE SMOOTH

One of a woman's main responsibilities was making clothes for the whole family (pp. 44–45). After she had woven a piece of linen, a woman probably stretched the cloth across a smoothing board and rubbed it with a glass ball until it was smooth and shiny. This board from Norway is made of whalebone.

Woolen tunic with embroidered collar

STARTING YOUNG

Viking boys played with toy weapons made of wood. They probably began serious weapon practice in their early teens. Some young men seem to have gone raiding when they were as young as 16.

Decorated belt end

Toy sword

Piece of leather covers the point, to prevent injury

Toy spear made of wood

Leather bag



Antler, probably from an elk



WELL COMBED

Combs carved out of bone or antler have been found all over the Viking world. These two are from Birka in Sweden. Viking men and women made sure their hair was well combed. They also used metal tweezers to pluck out unwanted hairs, and tiny metal ear scoops to clean out their ears.

Iron rivet



Linen headdress tied under the chin

Brooch

DAILY DRESS

Viking women were very particular about their appearance. This woman is wearing a long underdress. On top she has a short overdress, like a smock. This is held up by two brooches. An Arab who visited the town of Hedeby around 950 said that Viking women wore makeup around their eyes to increase their beauty. He also noted that many men did the same.

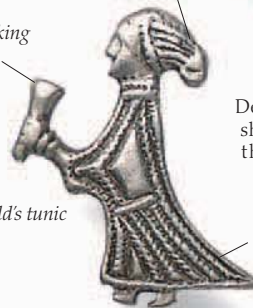


DRESS FASTENERS

Oval brooches were only worn by women. This pair comes from Ågerup in Denmark. Finding brooches such as this in a grave shows that the dead person was a woman. While the dress has usually rotted away, the position of the brooches on the body—just below the shoulders—shows how they were worn.

Hair tied in bun

Drinking horn



Child's tunic

Train of dress

SWEDISH WOMAN

This silver pendant is from Birka, Sweden. It is in the shape of a woman in a dress with a triangular train. She is carrying a drinking horn, and may be a Valkyrie (p. 53).

Child's shoes

Bead necklace

Overdress

ALL DRESSED UP

Like the one above, this small pendant shows a well-dressed woman. She is wearing a shawl over a long, flowing dress. Her hair is tied in an elegant, knotted style. Her beads and a large brooch are easy to identify. The importance of pendants like these is unclear. They could have had some magical meaning. The figures represented may even be goddesses.

Long underdress

Knotted hairstyle

Large ring brooch

Shawl

Long underdress with a flowing train

Overdress decorated with woven bands



At home

HOME LIFE REVOLVED around a central hall or living room. The layout was much the same all over the Viking world. A long, open hearth (fireplace) burned in the center, with a smoke hole in the ceiling above. The floor was stamped earth. The people sat and slept on raised platforms along the curved walls. Pillows and cushions stuffed with duck down or chicken feathers made this more comfortable. Wealthy homes might have a few pieces of wooden furniture and a locked chest for precious belongings. Houses often had smaller rooms for cooking or spinning on either side of the main hall. Small buildings with low floors dug out of the ground were used as houses, workshops, weaving sheds, or animal barns. A chieftain's hall could be lined with wall hangings or carved or painted wooden panels. In around 1000, an Icelandic poet described panels decorated with scenes of gods and legends in the hall of a great chieftain. The poem was called *Húsdrápa*, which means "poem in praise of the house."



HOUSES, ICELANDIC STYLE

Good lumber was scarce in Iceland and other North Atlantic islands (pp. 20–21). So houses usually had stone foundations and walls and roofs made of turf. Some houses were dug into the ground, which kept them warm in winter and cool in summer. The walls were lined with wooden paneling to keep out the cold and damp.

Head planks carved with beautiful animal heads



Slats morticed into sideboards

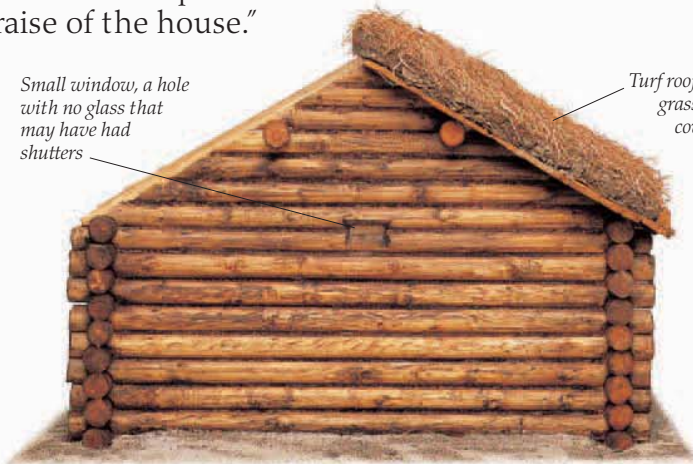
SWEET DREAMS

Only the rich had chairs or beds.

Ordinary Vikings sat on benches or stools, or just squatted or sat cross-legged on the floor. At night, they stretched out on rugs on raised platforms. The wealthy woman in the Oseberg ship (pp. 54–57) was buried with not one but three beds. This is a replica of the finest one. It is made of beech wood. The head-planks are carved in the form of animal heads with arching necks. The woman probably slept on a feather mattress and was kept warm by an eiderdown, a quilt filled with down or feathers.

Small window, a hole with no glass that may have had shutters

Turf roof was green with grass in summer and covered with snow in winter



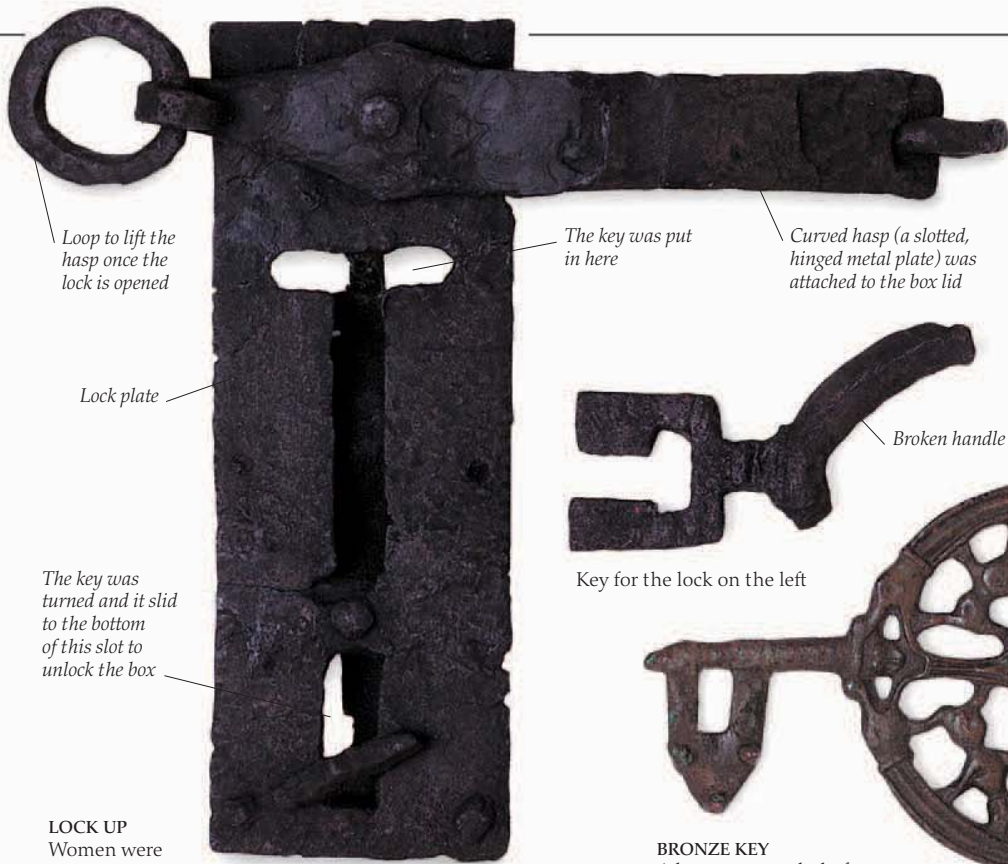
End view of the Trondheim house

TRONDHEIM HOUSE

This is a model of a house built in Trondheim, Norway, in 1003. Its walls are horizontal logs notched and fitted together at the corners. A layer of birchbark was laid on the pointed roof and covered with turf. The bark kept the water out, while the earth and grass acted as insulation. Houses were built in various other ways, depending on local traditions and the materials on hand. Wooden walls were often made of upright posts or staves (planks), as in the Danish forts (pp. 22–23). Others had walls of wattle (interwoven branches) smeared with daub (clay or dung) to make them waterproof. Roofs could be covered in shingles (wooden tiles), thatch, turf, or matted reeds.

Side view of the Trondheim house





Loop to lift the hasp once the lock is opened

The key was put in here

Curved hasp (a slotted, hinged metal plate) was attached to the box lid

Lock plate

The key was turned and it slid to the bottom of this slot to unlock the box



SILVER FOR THE RICH

A rich Viking once drank fruit wine from this tiny silver cup. Only 1 3/4 in (4.4 cm) high, it was found in Lejre, Denmark. It is decorated with four creatures with human faces and birdlike bodies.



Broken handle

Key for the lock on the left



Handle

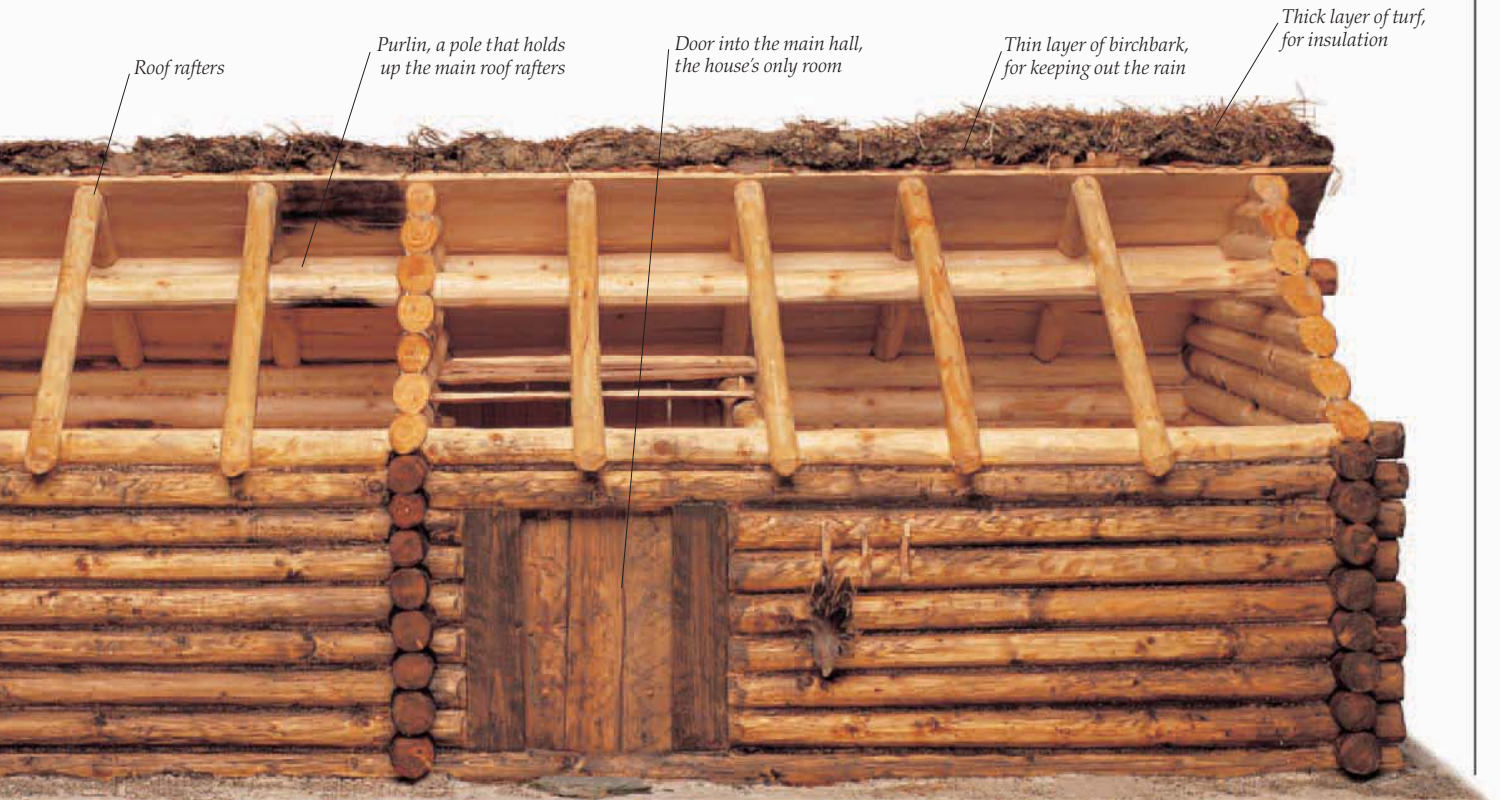
Openwork decoration, including four gripping beasts

BRONZE KEY

A key was a symbol of responsibility and dignity. This 9th-century Danish key is made of beautifully decorated cast bronze. Anyone who stole from a locked chest was severely punished.

LOCK UP

Women were in charge of the household, and especially the locked chest or box where the family valuables were kept. This iron lock comes from a box of maple wood. A woman in Onsild, Jutland, Denmark, probably kept coins or a few pieces of jewelry in it. When she died, some time in the 10th century, she was buried with the box and its key.



Roof rafters

Purlin, a pole that holds up the main roof rafters

Door into the main hall, the house's only room

Thin layer of birchbark, for keeping out the rain

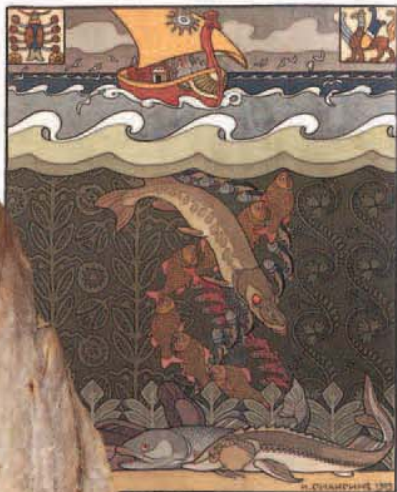
Thick layer of turf, for insulation

Mealtime

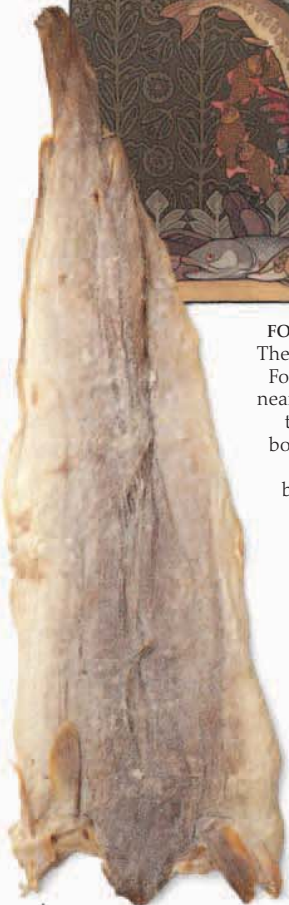
ALL DAY LONG, the fire in the hearth was kept burning for cooking and heating. The hole in the roof above the fire didn't work very well, so Viking houses were always full of smoke. Rich households had baking ovens in separate rooms. These were heated by placing hot stones inside them. Vikings generally ate two meals a day: one early in the morning, *dagverthr* (day meal), and the other in the evening, *nattverthr* (night meal), when the day's work was finished. Most Vikings drank beer made from malted barley and hops. But while the poor drank from wooden mugs, the rich used drinking horns with fancy metal rims. Wealthy people also enjoyed wine imported in barrels from Germany.



NORMAN FEAST
This feast scene from the Bayeux Tapestry (p. 10) shows a table laden with food and dishes. Vikings sat around trestle tables. The wealthy had richly decorated knives and spoons and imported pottery cups and jugs. More ordinary people ate and drank from wooden bowls and cups.



FOOD FROM THE SEA
The sea was full of fish. For Vikings who lived near the coast, fish was the staple food. The bones of cod, herring, and haddock have been found in many Viking settlements. People also caught eels and freshwater fish, such as trout, in the many rivers and lakes that crisscross Scandinavia.



DRIED COD
Food had to be preserved so it would keep through the winter. Fish and meat were hung in the wind to dry. They could also be pickled in saltwater. Salt was collected by boiling seawater, a boring job usually given to slaves. Fish and meat were probably also smoked.



Dried peas



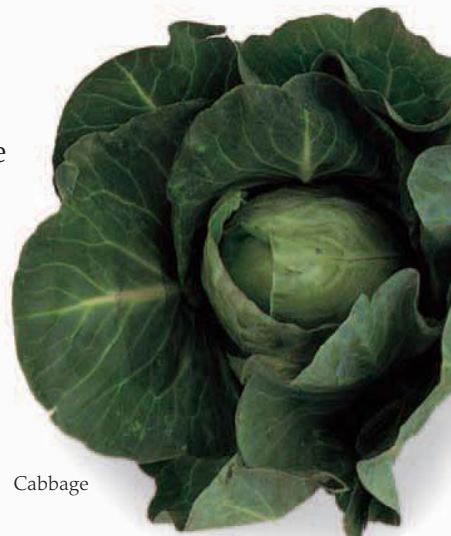
Pine tree, source of kernels and bark

PEAS AND PINE BARK
Poor Vikings made bread with whatever they could find. One loaf found in Sweden contained dried peas and pine bark.



FIT FOR A QUEEN
Horseradish was one of the seasonings found in the Oseberg burial ship (pp. 54–57), along with wheat, oats, and fruit.

Horseradish



Cabbage

HOME-GROWN CABBAGE
Cabbages and peas were the most common vegetables. Vikings often gathered vegetables in the wild.



Cumin, a spice found in the Oseberg burial



BAKING BREAD
Bread was kneaded in wooden troughs. Then it was baked on a griddle over a fire (as in this 16th-century Swedish picture) or in a pan that sat in the embers. Barley bread was most common, but rich people had loaves made of finer wheat flour.



Norman cooking meat





GARLIC BULB
Like modern cooks, the Vikings added garlic and onion to meat stews and soups.

POACHED EGGS
In the Atlantic Islands, Viking settlers gathered gulls' eggs for eating. They also roasted the gulls.



CAUGHT ON THE WING
Game birds like this duck were trapped or hunted with short arrows. Roasted on a spit, it would make a tasty meal.



A HARE IN MY SOUP
Hares were trapped and hunted. The Vikings also hunted elk, deer, bears, wild boars, caribou, seals, and whales for meat. Sheep, cattle, pigs, goats, geese, chickens, turkeys, and even horses were raised to be eaten.



Suspension loop

Iron handle

COOKING CAULDRON
Food was prepared around the hearth in the center of the living room. Meat was stewed in huge pots called cauldrons made of iron or soapstone. Some cauldrons were hung over the fire on a chain from the roof beam. Others, like this one from the Oseberg ship, were supported by a tripod.

The tripod's pronged feet were stuck into the dirt floor to keep the cauldron stable

Iron cauldron

One of the tripod's three legs



Blackberry



Raspberry

BERRY TASTY
Berries and wild fruits such as apples, cherries, and plums were gathered in the summer. Vikings may have grown fruit trees in gardens as well as picking wild fruits in the forest.

Old crack

Repair holes



PATCHED
This clay cooking pot has four holes where a patch was stuck over a crack.



BAYEUX BARBECUE
In this scene from the Bayeux Tapestry (p. 10), two Norman cooks heat a cauldron. The fire sits in a tray like a barbecue. To the left, a third man lifts cooked chunks of meat off a stove onto a plate. The Vikings may have cooked in similar ways.

Animals, wild and imagined



BROWN BEAR

Bears were hunted in the far north. Their skins were made into jackets and cloaks, and their claws and teeth were worn as pendants. Warriors may have thought that some of the bear's strength and courage would rub off on them (p. 14).

BEARS, WOLVES, mink, foxes, deer, and wild boar all roamed the dark forests of Norway and Sweden. Whales, otters, seals, walrus, and caribou lived in the far north. Sea birds flocked along the coasts, and game birds were common inland. The Vikings hunted most of these animals for their meat. They made clothes and bedding from feathers, furs, and hides, and bones and tusks were raw materials for jewelry, tools, and everyday objects like knife handles. Many of the finest objects were then traded (pp. 26–27). Viking legends and art are also crammed with wild beasts. But the animals that decorate jewelry, tools, and weapons are not real. They have been turned into fantastic and acrobatic creatures. Their hips are spirals, and plant shoots spring from their bodies. Some beasts become ribbons that twist around each other in intricate patterns.



BRONZE BEAST

This fierce animal with snarling teeth comes from a horse's harness bow (p. 41). It may have been intended to scare enemies and protect the horse and wagon.



STAG

Elk, deer, and caribou all have big antlers. Craftsmen sawed and carved these to create combs (pp. 31, 59). Deer skin was used for clothes and possibly wall and bed coverings. Venison (deer meat) was also eaten, either dried or roasted.



Gilt (gold-coated) silver

FANTASTIC ANIMAL

This brooch from Norway is in the shape of a slender, snake-like animal. It is caught up in a thin ribbon twisting in a fantastic pattern. This is known as the Urnes style of Viking art, after wood carvings on a church at Urnes in Norway.

Owl

Bird of prey

BIRD BROOCH

This brooch was found in a woman's grave in Birka, Sweden. It once decorated a belt worn by someone living in eastern Europe by the Volga River (pp. 18–19). A Viking took it home to Sweden, where a jeweler converted it into a brooch. The birds are very realistic and are easy to identify. A Viking craftsman would have turned them into fantastic creatures.



Animal's head

Bronze, cast in a mold

This is an openwork brooch, with open areas inside the main design



GRIPPING BEAST

Acrobatic figures called gripping beasts became popular in Viking art in the 9th century. This playful animal writhes and turns inside out, gripping its own legs and even its throat.



Gripping beast from a 9th-century Danish brooch



SNAKE CHARM

Snakes were common in Viking lands and are important in poems and sagas (pp. 50–51). This silver snake pendant was worn by a Swedish woman as an amulet, a good-luck charm.

Unlike deer, sheep do not shed their horns every year, so the horns get bigger with age

Each horn of an old Manx Loghtan ram (male) can weigh 12 oz (350 g) and reach 1½ ft (45 cm) in length



CAROLINGIAN CUP

Craftsmen outside of Viking lands based their decoration mainly on real animals. This cup was made farther south in the Carolingian Empire, in modern France or Germany. It is made of gilt (gold-coated) silver decorated with the figure of a bull-like animal and symmetrical leaves of the acanthus plant. The cup must have been traded or plundered, because it was found in a Viking hoard at Halton Moor, England, with a silver neck-ring (p. 47) and a gold pendant (p. 46).



LONE WOLF

The wolf roamed wild in the mountains of Scandinavia. Then, as now, people were terrified of its eerie howl. In Viking legend, the god Odin is gobbled up by a monstrous wolf, Fenrir (p. 51). This is one of the horrible events of *Ragnarök*, or the “Doom of the Gods.”

HORNED HELMET

The Manx Loghtan sheep goes back to the Viking age. Now it is only found on the Isle of Man, an island between England and Ireland that was colonized by Vikings in the 9th century. Sheep were farmed all over the Viking world (pp. 38–39). In mountainous areas, Viking shepherds took their flocks to high pastures for the warm summer months. The Manx Loghtan was prized for its ability to thrive on exposed hillsides, and for the softness of its wool. It could grow two, four, or even six horns.

Farming

MOST VIKINGS WERE FARMERS. They often had to work infertile land in harsh weather. The difficult conditions led many farmers to set sail for faraway lands like Iceland (pp. 20–21), where they hoped to find fertile soil and more space for their animals and crops. Sheep, cows, pigs, goats, horses, poultry, and geese were all raised for eating. The milk of cattle, goats, and sheep was drunk or turned into

SHEARS

Vikings sheared sheep, cut cloth, and even trimmed beards with iron shears like these.



butter and cheese. Farms often had separate byres, sheds where cattle could pass the winter. Even so, many died of cold or starvation. Rich farms had byres to house 100 cattle. A man's wealth was often measured in animals. Other, a merchant from northern Norway, told King Alfred of England that he had 20 cattle, 20 sheep, 20 pigs, and a herd of 600 caribou. But his main source of income was the furs he traded.



Thick fleece was shed once a year, in spring

BLACK SHEEP

Hebridean sheep were farmed by Vikings on the Hebrides islands, off the coast of Scotland. Like Manx Loghtan sheep (p. 37), they shed their wool naturally, and do not have to be sheared. They can live on sparse vegetation and are very hardy.



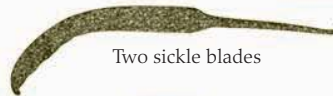
JARLSHOF FARM

This ruin of a 9th-century Viking farmhouse was found on the Shetland Islands, Scotland. It had two rooms, a long hall, and a kitchen. The farmers sat and slept on platforms that ran along the curved walls. A hearth burned in the center of the hall.



MILKING CARIBOU

This 16th-century Swedish engraving shows a woman milking caribou. In the far North, people farmed caribou for their milk, meat, and hides. Caribou were also hunted in many places, including Greenland (pp. 20–21).



Two sickle blades



Ard blade

HARVEST TOOLS

The ground was broken up in the spring with an ard, a simple plow. Later, grain was cut with iron sickles with wooden handles. The blades of these tools were sharpened with whetstones.



PLOWING AND SOWING

This detail from the Bayeux Tapestry (p. 10) shows Normans plowing (far left) and sowing seeds (left). The Vikings would have used similar techniques.



Top stone

Bottom stone

FLOUR POWER

Grain was ground into flour with a quern stone. This one comes from a Viking farm at Ribbleshead in Yorkshire, England. The grain was placed on the bottom stone. Then the top stone was laid on it and the wooden handle was turned around. Rich Vikings preferred finer flour, ground with querns made of lava imported from the Rhineland in Germany.



Ears and grains of spelt wheat



Ground wheat

GRAINS

Spelt is an early form of wheat. The Vikings also grew barley and rye.



LONGHORN COW

Cattle like this were once farmed in many parts of the Viking world. Now new breeds have been developed, and longhorn cattle survive on only a few special farms. Domestic animals weren't just raised for their meat and milk. Cattle hide, sheep's wool, and poultry feathers were also used to make clothes and bedding. Cattle horns are hollow and made ideal drinking horns. These were tricky to put down, however, and had to be rested in special holders. Animal bones were carved into knife handles, combs, pins, needles, and even jewelry.



Getting around

MUCH OF SCANDINAVIA is rugged and mountainous. The large forests, lakes, and marshes make traveling difficult, especially in bad weather. Vikings went everywhere they could by ship. Traveling overland was often easiest in winter, when snow covered uneven ground and the many rivers and lakes froze over. People got around on sleds, skis, and skates. In deep snow, they wore snowshoes. Large sleds were pulled by horses. To stop the horses from slipping on the ice, smiths nailed iron crampons (studs) to their hooves. In the summer, Vikings rode, walked, or traveled in wagons pulled by horses or oxen. Roads stuck to high land, to avoid difficult river crossings. The first bridge in Scandinavia, a huge wooden trestle, was built near Jelling in Denmark around 979, probably on the orders of King Harald Bluetooth.

WELL GROOMED
A complete wooden wagon was found in the Oseberg burial ship (pp. 54–57). It is the only one known from Viking times. The surface is covered in carvings, including four heads of Viking men. The men all have well-groomed beards and mustaches.



A GOOD DEED
Christian Vikings thought building roads and bridges would help their souls go to heaven. This roadway in Täby, Sweden, was built by Jarlabanke (p. 59). He celebrated his good deed by raising four rune stones.



Bone ice skate from York, England



16th-century engraving of a Swedish couple skiing with single skis, as the Vikings did

ICE LEGS

The word ski is Norwegian. Prehistoric rock carvings in Norway show that people have been skiing there for at least 5,000 years. The Vikings definitely used skis, but only one example has survived. Ice skates have been found all over the north. The Vikings called them ice legs. They were made by tying the leg bones of horses to the bottoms of leather boots. The skater pushed him or herself along with a pointed iron stick like a ski pole.



HORSING AROUND
Vikings were fine riders. This silver figure of a horseman comes from Birka in Sweden. It dates from the 10th century. The rider is wearing a sword and must be a warrior.

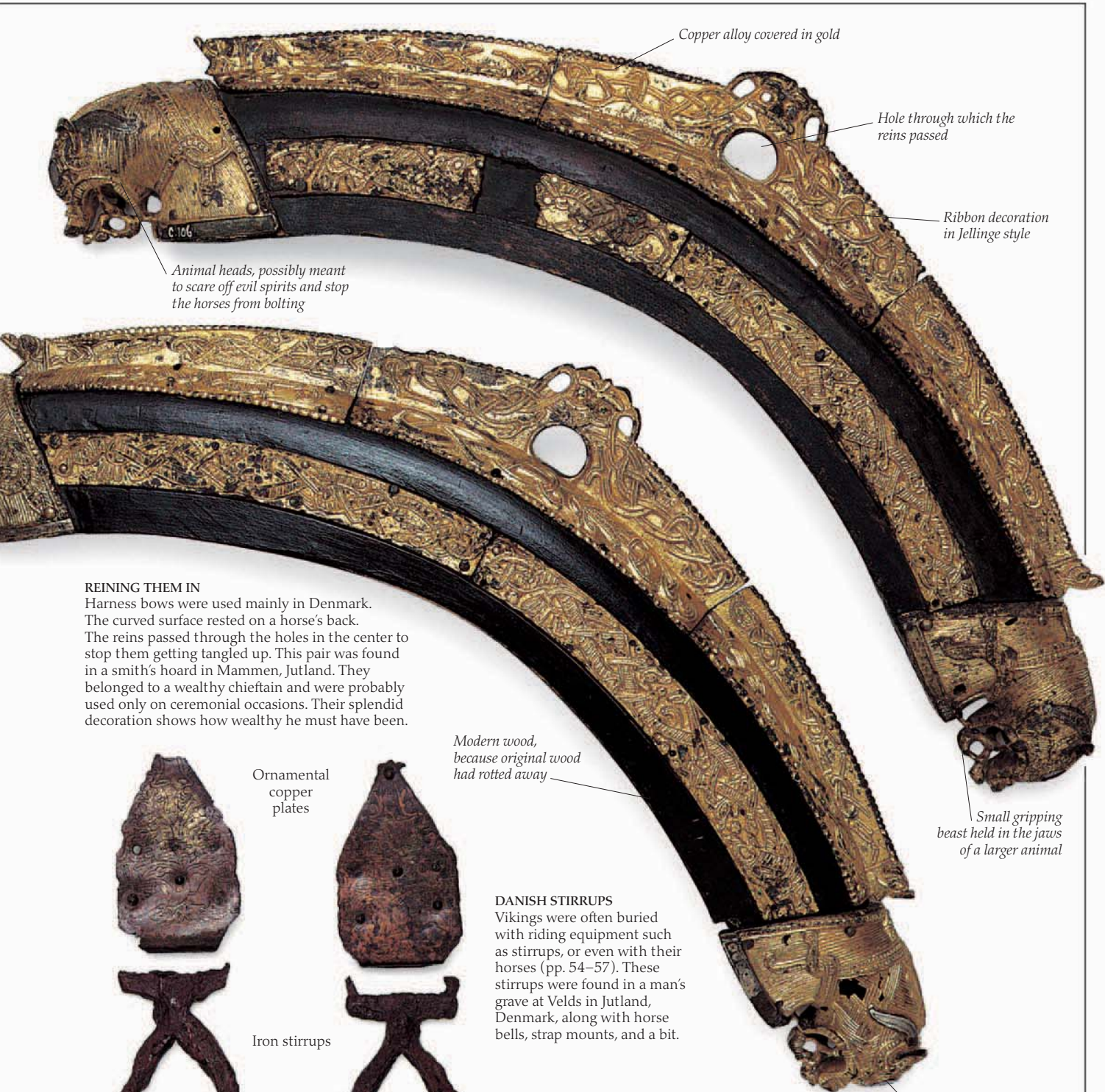
Beech body decorated in iron studs with tin-covered heads

One of four carved animal heads



Curved oak runners

SLED
This is one of the three fine sleds from the Oseberg burial ship (pp. 54–57). The curved runners are carved with beautiful decoration. Lashed on top is an open box. Ferocious animal heads snarl from the four corners.



Copper alloy covered in gold

Hole through which the reins passed

Ribbon decoration in Jellinge style

C. 106

Animal heads, possibly meant to scare off evil spirits and stop the horses from bolting

REINING THEM IN

Harness bows were used mainly in Denmark. The curved surface rested on a horse's back. The reins passed through the holes in the center to stop them getting tangled up. This pair was found in a smith's hoard in Mammen, Jutland. They belonged to a wealthy chieftain and were probably used only on ceremonial occasions. Their splendid decoration shows how wealthy he must have been.

Modern wood, because original wood had rotted away

Small gripping beast held in the jaws of a larger animal

Ornamental copper plates

Iron stirrups

DANISH STIRRUPS

Vikings were often buried with riding equipment such as stirrups, or even with their horses (pp. 54–57). These stirrups were found in a man's grave at Velds in Jutland, Denmark, along with horse bells, strap mounts, and a bit.

Silver eye

Side view

Front view

WELL TRAVELED
These stirrups are similar to the Danish pair. But they were found in the Thames River in London and were probably made in England. Some Vikings took their riding equipment with them on their travels. They had to get horses from the local people, though.

In the workshop

THE VIKINGS OWE THEIR SUCCESS in part to the skilled craftsmen who made their strong weapons and fast ships. The weapon smith who forged sharp swords, spears, and axes (pp. 14–15) was the most respected. But smiths also made all the iron tools for working metal and wood. They knew how to work different metals and how to decorate them with elaborate techniques. Smiths also produced everyday objects like locks and keys, cauldrons for cooking, and iron rivets for ships. Viking carpenters were also highly skilled. They made a wide range of objects, including ships. They knew exactly what wood to use for what purpose and how to cut timber to give maximum strength and flexibility. They carved decorations on many objects, and sometimes painted them with bright colors. Most of the colors have faded now, but enough survive to give an idea of the original effect.



Molding iron for making grooves or patterns on planks

PRESSED GOLD

This gold brooch from Hornelund in Denmark was made from a lead die. The jeweler pressed the die into a sheet of gold to create a pattern. Then he decorated the surface with gold wire and blobs or granules of gold. Only the richest chieftains or kings could afford such a beautiful brooch.



Twisted gold wire forms heart-shaped patterns

One of three heart-shaped loops made of strands of twisted gold wire

Granules of gold

Plant decoration shows influences from western Europe, but the technique is purely Scandinavian



Lead die from Viborg, Denmark, used for making precious metal brooches like the Hornelund brooch

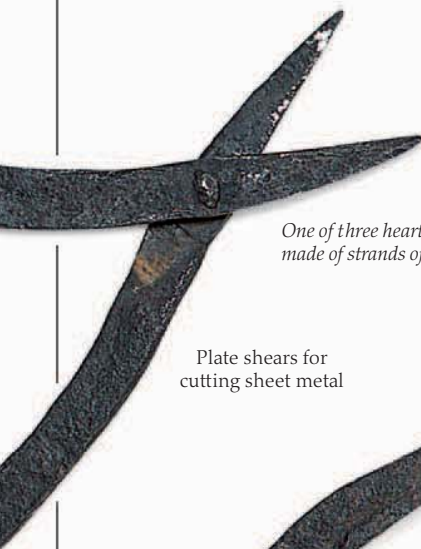
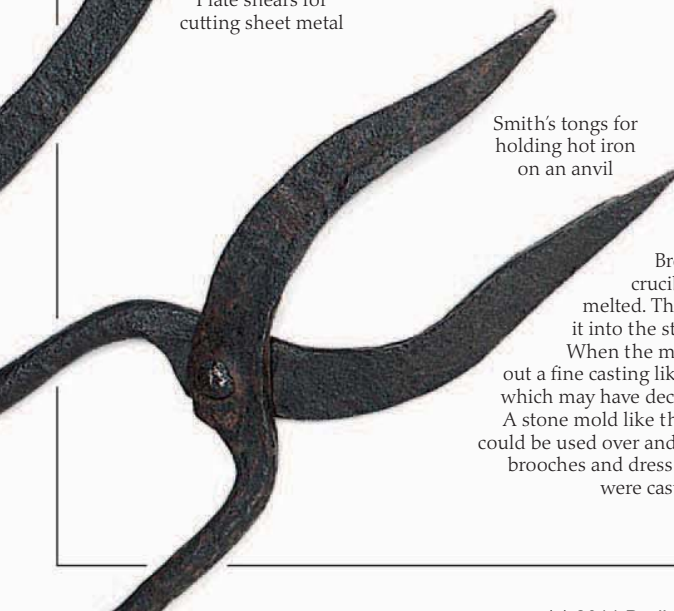


Plate shears for cutting sheet metal



Smith's tongs for holding hot iron on an anvil

MAKING DRAGONS

Bronze was heated in a crucible over a fire until it melted. Then the smith poured it into the stone mold (far right). When the metal cooled, he lifted out a fine casting like this dragon head, which may have decorated a fancy box. A stone mold like the one shown here could be used over and over again. Many brooches and dress pins (pp. 48–49) were cast in similar molds.



Modern casting



Stone mold for making bronze dragon heads from Birka, Sweden

Light hammerhead



Heavy hammerhead



HAMMERS
Hammers came in various weights. The heaviest were used for welding and forging swords, the lightest for delicate work such as shaping wire.

Small detachable bit



Drill bits

Larger detachable bit, for boring bigger holes

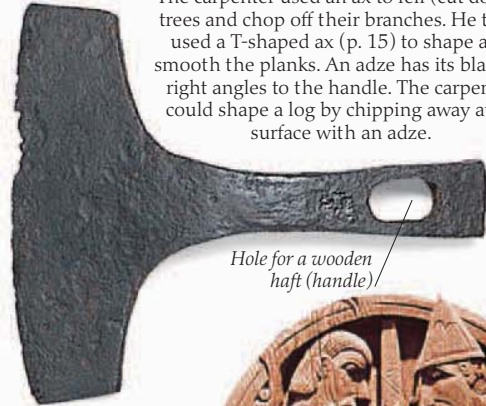


AXES AND ADZES

The carpenter used an ax to fell (cut down) trees and chop off their branches. He then used a T-shaped ax (p. 15) to shape and smooth the planks. An adze has its blade at right angles to the handle. The carpenter could shape a log by chipping away at its surface with an adze.



Felling a tree with an ax



Hole for a wooden haft (handle)

Adze head



SIGURD'S SWORD

This carving is part of a 12th-century doorway from the church in Hyllestad, Norway. It shows the hero Sigurd breaking a sword that the smith Regin has made for him. In another scene (p. 51), Regin holds the hot iron with a pair of tongs and hits it against the anvil with a hammer. A helper works the bellows to keep the fire in the forge burning.

Wood is modern, as the original wood had rotted away



The carpenter turned this T-shaped handle to bore the hole

A BORING TOOL

This drill, or auger, was used to make holes in planks, including the holes for the nails that held ships' planks together. It had five drill bits of different sizes.

Back gives extra strength



BONE CUTTER

A small hacksaw could cut through bone and metal. The craftsman could also use its narrow blade for fine work.

Tang, a spike that used to fit into a wooden handle



WOOD SAW

The small lengths of wood needed to make buckets, boxes, and furniture were cut with this large saw.

Iron-toothed blade

Shaped end for the carpenter to lean on

Wooden handle



SHIPBUILDING

The Bayeux Tapestry (p. 10) shows how the Normans made ships. In the detail on the left, a man fells a tree. Above, a man trims a tree while another shapes the split trunks into planks with a T-shaped ax. Below, the planks are overlapped and nailed together (foreground), while one carpenter smooths the planks and another makes holes with a drill, or auger (background).



A smith's tools

The tools on these two pages are part of a large hoard found in a chest at Mästermyr on the island of Gotland, Sweden. Their owner was a craftsman. He was a smith and was able to work with sheet metal to make cauldrons and locks, but he could also cast, weld, and decorate bronze. He was also a shipbuilder, carpenter, and wheelwright, and he probably made the wooden tool chest as well!

Spinning and weaving

ALL VIKING WOMEN (and probably some men) spent part of the day spinning wool or flax. Then they wove the family's clothes on a vertical loom that stood against the wall. Everyday clothes were cut from plain wool. But the borders of men's tunics and women's dresses were woven with geometric patterns, usually in bright colors or, for the very rich, gold and silver threads. Silk imported from far-off lands was made into hats and fancy borders for jackets. Fur trimmings on cloaks added a touch of style. Imitation fur was also fashionable.



Linen head cloth

Wool is stretched and spun

Raw wool

Spun wool

Distaff stopped unspun wool from getting tangled



Medieval woman spinning with raw wool held on a distaff

SPINNING GOOD YARN

The spinner picks a tuft of raw wool from the basket and pulls it into a strand. She winds this thread around the spindle as it spins. When one tuft is spun, she adds the next tuft of wool to the strand.

Spindle whorl

Spindle

Raw, combed wool



Cane basket

Spindle whorl



Pin-beaters

Spindle

SPINNING TOOLS

A spindle is a wooden rod used for spinning. It is passed through a spindle whorl, a round piece of clay or bone that makes the spindle spin with its weight. The weaver uses rods called pin-beaters to straighten threads and make fine adjustments to the woven cloth.



Brown silk

ANCIENT CLOTHES

Fragments of a chieftain's clothes were found in a grave at Mammen, Denmark. They date from the late 10th century. This is the end of a long braid that the man may have used to fasten his cloak. It is made of silk, with gold embroidery on the borders. Animal figures and human faces also decorate the man's cloak and shirt. A reconstruction of his entire outfit can be seen on page 29. The beautiful Mammen Ax (pp. 6-7) was found in the same grave.

WEAVING ON A VERTICAL LOOM

The warp (vertical threads) on a vertical loom is kept taut by weights at the bottom. There are two sets of warp threads, one on each side of the beam. The weaver passes the weft (a horizontal thread) between the two. Then she raises the heddle rod, which brings the back warp to the front, and passes the weft back again. After each pass she uses a weaving batten to push the new weft against the cloth above. Pass by pass, the woven cloth grows longer.

Cross beam where the finished cloth is rolled

Handle for turning the beam as the cloth is made

Wooden upright was leaned against the wall

Rest for the beam

Finished cloth, made up of warp and weft threads

Heddle rod with its rest

Weft thread

Hole for moving the heddle-rod rest down

Beam dividing the warp threads

Warp threads

Loom weights, heavy rings of clay or stone that keep the warp threads taut



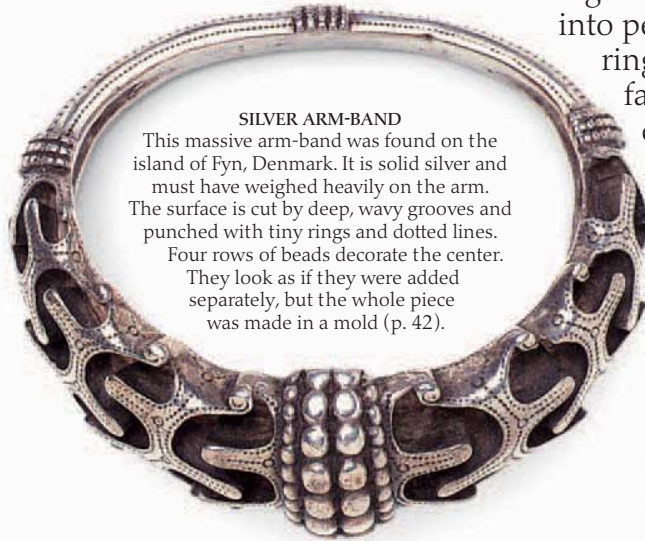


GOLD PENDANT
Women wore pendants on the end of necklaces. This thin piece of embossed gold was worn as a pendant. It was found in a hoard (p. 49) in Halton Moor, England.

Jewelry

THE VIKINGS LOVED BRIGHT ornaments. Their metalworkers were highly skilled at the intricate decoration of jewelry. Both men and women wore brooches, necklaces, finger-rings, and arm-bands (like bracelets). Wearing gold and silver jewelry was a sign of wealth and prestige. After a successful raid, a king might reward a brave warrior by giving him a prize piece. Bronze didn't shine as brilliantly as gold, but it was less expensive. Pewter, a mixture of silver and other metals, was cheaper still. The poorest Vikings carved their own simple pins and fasteners from animal bones left over after cooking.

Colored glass, jet, and amber were all made into pendants, beads, and finger-rings. Vikings also picked up fashions in jewelry from other countries and changed them to suit their own style.



SILVER ARM-BAND
This massive arm-band was found on the island of Fyn, Denmark. It is solid silver and must have weighed heavily on the arm. The surface is cut by deep, wavy grooves and punched with tiny rings and dotted lines. Four rows of beads decorate the center. They look as if they were added separately, but the whole piece was made in a mold (p. 42).



RECYCLING
Vikings who settled abroad took their jewelry styles with them. This gold arm-band was made in Ireland. Vikings raided many Irish monasteries in search of precious metals. Sacred books and objects often had mounts made of gold and silver, which they ripped out and carried away. Later, smiths would melt the metals down and turn them into jewelry.

Gold wires of different thicknesses coiled together



THOR'S HAMMER
Thor's hammer (pp. 7, 53) was often worn as a pendant, just like the Christian cross (right). Here animal heads at the ends of the chain bite the ring from which the hammer hangs.



Chain of fine silver wires linked together as if they were knitted

Animal head

Grooves are filled with niello, a black compound, to make details stand out



SILVER SPIRAL
Spiral arm-bands could be worn high on the upper arm. They were only popular in Denmark, and were imported from the Volga area of Russia. This fine silver ring was found near Vejle in Jutland, Denmark.

IN ALL HIS FINERY
This tough Viking is wearing every imaginable kind of jewelry. His bulging biceps are being squeezed by spiral arm-bands in the form of snakes. But in many details, this old drawing is pure fantasy.



SILVER CROSS
An open, leafy pattern decorates this silver Christian cross. The cross and chain were found in Bonderup, Denmark. They were probably made in about 1050.

Four double-twisted gold rods braided together

Danish necklace made of glass beads

NECKLACES AND RINGS
The Arab traveler Ibn Fadhlān (pp. 19, 55, 67) met Viking women in Russia around 920. He wrote that "round the neck they have ornaments of gold or silver." These would have included neck-rings, which are stiff and inflexible, and necklaces, which can twist and bend. This gold neck-ring is the largest and most splendid ever found. It is solid gold and weighs over 4 lb (1.8 kg). It could only have been worn by a broad-chested man, because it is more than 1 ft (30 cm) wide! Many Viking neck-rings were made by melting down silver Arab coins. Glass made the brightest beads. Bead-makers started with imported glass or broken drinking glasses. They heated these up and fused them together to make beads with bright patterns and swirling mixtures of colors.

Silver neck-ring from Halton Moor, England, made of braided silver wires

A farmer in Tissø, Denmark, found this massive gold neck-ring while plowing a field

ARM-BAND WITH TREES
This gold arm-band from Råbylille, Denmark, is stamped with some very fine decoration.



Two gold finger-rings from Viking-age Ireland



Gold ring from Denmark inscribed with runes (pp. 58-59)

THREE GOLD RINGS

Finger-rings were made like miniature arm-bands. Both men and women wore them. But Swedish women were the only ones to wear earrings, which they dangled from chains looped over the ear.

Brooches

Clasps and brooches were often lavishly decorated. But they weren't just for show. All Vikings wore brooches to hold their clothes in place. Women usually had two oval brooches to fasten their overdresses. Men held their cloaks together with a single brooch on the right shoulder. In this way, the right arm—the sword arm—was always free. Certain styles, such as oval and trefoil brooches, were popular all over the Viking world. Others, like the box brooches from Gotland, were only fashionable in certain areas.

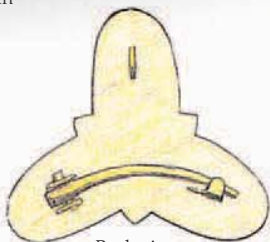
One of four squatting human figures made of gold



Top view of Mårtens box brooch



Front view



Back view

SHAPED LIKE CLOVER LEAVES

Trefoil brooches have three lobes. In the 9th and 10th centuries, women wore them to fasten their shawls. The finest ones were made of highly decorated gold and silver. Poorer women had simpler brooches, mass-produced in bronze or pewter. The trefoil style was borrowed from the Carolingian Empire to the south of Scandinavia, in what is now France and Germany.

THE PITNEY BROOCH

The Urnes art style was very popular in England and Ireland during the reign of Cnut the Great (1016–35). This beautiful gold brooch in the Urnes style was found at Pitney in Somerset, England.



Side view of bronze box brooch from Gotland



BOX BROOCH

Box brooches were shaped like drums. The magnificent brooch on the left comes from Mårtens on the island of Gotland, Sweden. A very wealthy woman wore it to fasten her cloak. The base is made of cast bronze, but the surface glitters with gold and silver.



Head of gripping beast

GRIPPING BEASTS

Four gripping beasts (p. 37) writhe across this silver brooch made in Denmark. It was found at the site of Nonnebakken, one of the great Viking forts (pp. 22–23).



Heads covered in gold

Hair

Beard

Long mustache

Ears

Tin-coated ring and pin

MEN'S HEADS

The tips of this brooch from Høm in Denmark are decorated with three men's heads. Each face has staring eyes, a neat beard, and a long mustache. Brooches like this were first made in the British Isles. The Vikings liked them so much they made their own.

Head of slender animal

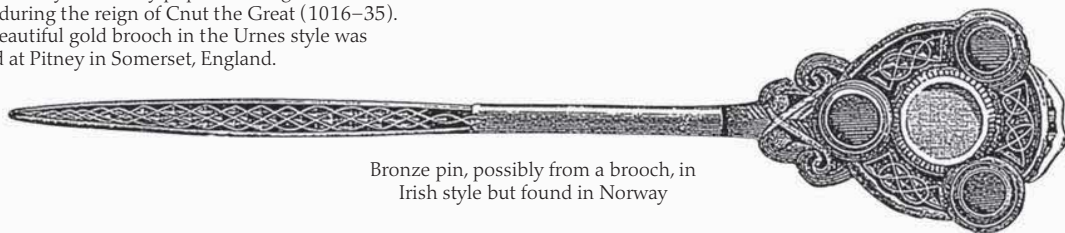


URNES AGAIN

The Urnes art style featured a snaky animal twisting and turning in dynamic coils (p. 36). It was the most popular decoration for 11th-century brooches, like this bronze one from Roskilde, Denmark.



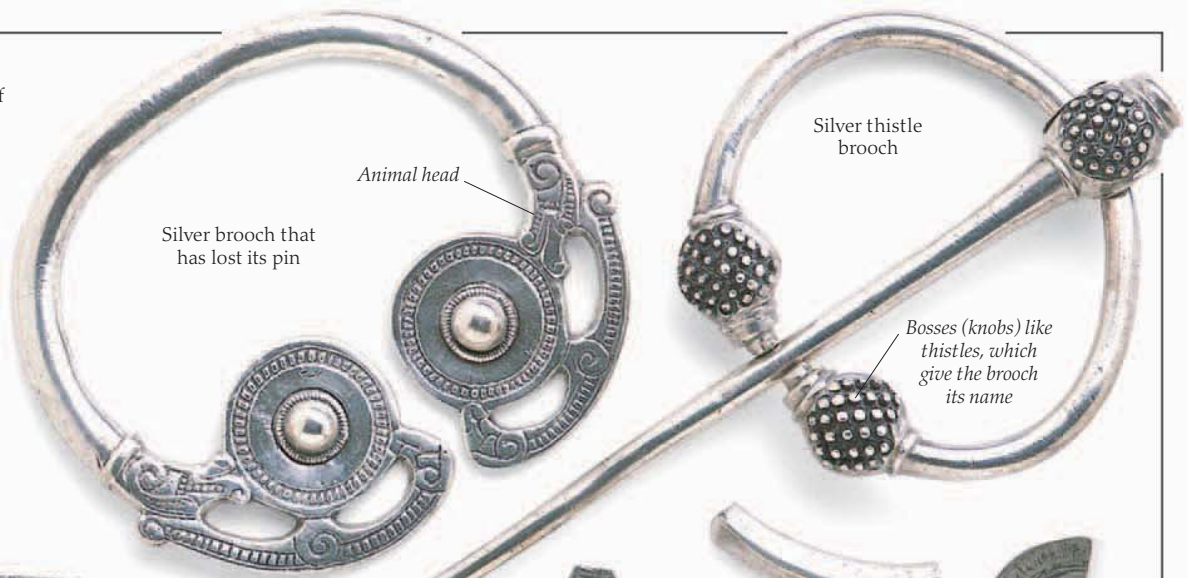
Long pin would have been stuck through the cloak



Bronze pin, possibly from a brooch, in Irish style but found in Norway

BURIED TREASURE

The silver objects at the top of this page are all from a hoard found in Goldsborough churchyard in Yorkshire, England. The big "thistle" brooch was probably made in England. Buried with it were fragments of brooches and arm-bands, and another brooch without a pin.



Animal head

Silver brooch that has lost its pin

Silver thistle brooch

Bosses (knobs) like thistles, which give the brooch its name



Pieces of hack silver



Hack silver



Cut coin



Boss broken off a thistle brooch



Hoard

There were no banks in Viking times. So many Vikings buried their valuables in a secret spot for safekeeping. These stashes of buried treasure are called hoards. If a Viking died in battle or just forgot where a hoard was hidden, it could lie in the ground for centuries. Over a thousand Viking hoards have since been discovered. The largest one, found in Cuerdale, England, contained 88 lb (40 kg) of silver. Hoards may include jewelry, coins, gold and silver ingots (oblong blocks), and hack silver—pieces of chopped-up silver (p. 27).

Silver with a thin coating of gold



Amber set in the pin head

Piece of inlaid blue glass

IRISH BROOCH IN A NORWEGIAN GRAVE

What was this Irish brooch doing in a woman's grave in Norway? She was buried in the 10th century, but the brooch was made at least a hundred years earlier in Ireland. Her husband may have bought or stolen it on an expedition to Ireland.

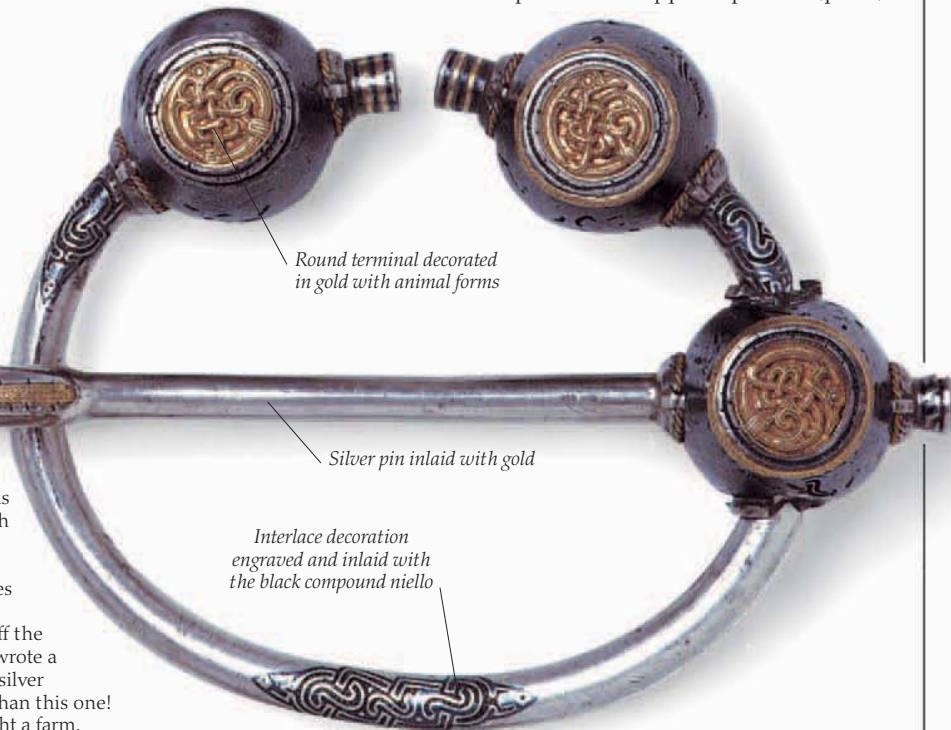
WEIGHED DOWN BY FASHION

One of the biggest pieces of Viking jewelry known, this silver brooch was found at Møllerløkken on the Danish island of Fyn. It is called a penannular brooch. It was made in Scandinavia, but the style was based on dress pins the Vikings saw in the British Isles. Huge brooches with pins this long must have been cumbersome and dangerous to wear. Their main purpose was to show off the owner's wealth. An Icelandic story tells of a poet who wrote a wonderful patriotic poem. As a reward he was given a silver brooch that weighed 25 lb (11.5 kg)—32 times more than this one! The delighted poet sold the monster brooch and bought a farm.

Round terminal decorated in gold with animal forms

Silver pin inlaid with gold

Interlace decoration engraved and inlaid with the black compound niello



Games, music, and stories

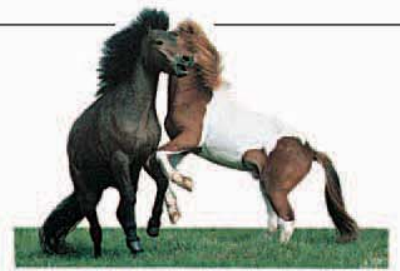


SWEET HARP

In rich households, musicians played the harp or lyre to accompany stories and poems. Vikings were also avid singers. Talented singers would perform at feasts, and the whole assembly might join in a ballad or a popular folk song.

A FEAST WAS A TIME to relax. After they had eaten their fill, Vikings played games, told stories, and listened to music. Kings had their own poets, called *scalds*, who entertained guests and praised the king. Stories and poems were told from memory and passed down from father to son. People knew all the exciting episodes by heart. Popular legends like Thor's fishing trip were often carved on stone or wood (pp. 58–59).

Jesters and jugglers often amused the guests with tricks and funny dances. Some games were played on elaborate boards with beautifully carved pieces. Others were scratched on wood or stone, and broken pieces of pottery or scraps of bone were used as counters. Many outdoor pastimes were the same as today. During the long winters, Vikings went skiing, sledding, and skating (p. 40). In the summer, they fished, swam, and went boating in the cold rivers and fjords.



HORSE FIGHTING

These Icelandic ponies are fighting in the wild. Vikings enjoyed setting up fights between prize stallions (male horses). It was a serious matter, with bets laid on the winner. Horse-fighting may have played a part in religious feasts and ceremonies. The Vikings may have thought the winning horse was a special favorite of the gods.



DANCING GOD

This silver figure from Sweden may be a dancing god. He is carrying a sword in one hand and a stave or spear in the other. Dancing was popular after feasts and played a part in religious ceremonies. Some dances were slow and graceful. In the wilder ones, the dancers leaped around violently. After the coming of Christianity (pp. 62–63), priests tried to stop dancing altogether.

Such a horned headdress may have started the myth about Vikings wearing horned helmets

Sound is produced as air passes this hole

Stave

Sword



Blow here

BONE FLUTE

A Swedish Viking made this flute by cutting holes in a sheep's leg bone. He or she played it like a recorder, by blowing through one end. Covering the finger holes produced different notes.

Fingers cover the bottom holes



Carved human head

Carved border decoration in the Borre art style

BALLINDERRY BOARD

A popular Viking board game was *hneftafl*.

One player used his eight pieces to protect the king from the other player, who had 16 pieces. This wooden board from Ballinderry, Ireland, may have been used for *hneftafl*. The central hole could have held the king.

Game pieces fit into the board's 49 holes

FIGURES OF FUN

Gaming pieces could be simple counters or little human figures. This amber man (far right) may have been the king in a game of *hneftafl*. He is holding his beard in both hands.



Two walrus ivory gaming pieces from Greenland



Amber gaming piece from Roholte, Denmark



In another part of the story, Sigurd's brother-in-law Gunnar tries to escape from a snake pit by playing a lyre with his toes and charming the snakes

Doorway was carved around 1200



Fafnir the dragon

Sigurd kills Regin

Sigurd kills Fafnir

DOOM OF THE GODS

The Vikings told stories of Ragnarök, the "Doom of the Gods." This was a great battle between good and evil, when the gods would fight it out with horrible giants and monsters. The detail above comes from a 10th-century cross on the Isle of Man. It shows the god Odin (pp. 52–53) being eaten by the monstrous wolf Fenrir (p. 37).

Sigurd's horse Grani loaded with treasure

Sigurd tests the sword on the anvil and breaks it in two

Birds in a tree

The story starts with Regin forging Sigurd's sword

Sigurd sucks his thumb while cooking the dragon's heart

SIGURD THE DRAGON-SLAYER

The adventures of the hero Sigurd are carved on this wooden doorway from the church at Hyllestad, Norway. Sigurd won fame and fortune by killing the dragon Fafnir. The sword he used was forged by the smith Regin, who was the dragon's brother. But Regin was plotting to kill Sigurd and steal the treasure for himself. Some birds tried to warn Sigurd, but he couldn't understand them. Luckily, he burned his hand cooking the dragon's heart and put his thumb into his mouth. One taste of the dragon's blood and Sigurd could understand the birds' twitterings. So he grabbed his sword and killed Regin.

Gods and legends

Cone-shaped hat

THE VIKINGS BELIEVED IN MANY different gods and goddesses. The gods all had their own personalities, much like human beings. The chief gods were Odin, Thor, and Frey. Odin, the god of wisdom and war, had many strange supernatural powers. Thor was more down-to-earth. He was incredibly strong, but he wasn't very bright. Frey, a god of fertility, was generous. The German traveler Adam of Bremen visited Uppsala, Sweden, in about 1075. He saw a great temple with statues of Odin, Thor, and Frey. Earlier in the Viking Age, people worshiped outdoors, in woods and on mountains, and by springs and waterfalls.

One hand holding his beard, a symbol of growth



THREE GODS?

These three figures have been identified as Odin (left), Thor (middle), and Frey (right). But they may be kings or Christian saints. They are on a 12th-century tapestry from Skog Church in Sweden (p. 63).

GODLY FAMILY

Frey was a god of fertility and birth. The best image of him is this small statue from Södermanland in Sweden. It is only 3 in (7 cm) high. People called on Frey in the spring for rich crops. When they got married, they asked Frey to bless them and give them many children. His sister Freyja was a goddess of fertility and love. One story says that half the warriors killed in battle went to join Freyja, while the rest went to Odin.

MONSTROUS MASK

Frightening faces were sometimes drawn on memorial stones or pieces of jewelry. They may be gods, or they might have been meant to scare off evil spirits. This face from a stone in Århus, Denmark, has a long braided beard and glaring eyes.





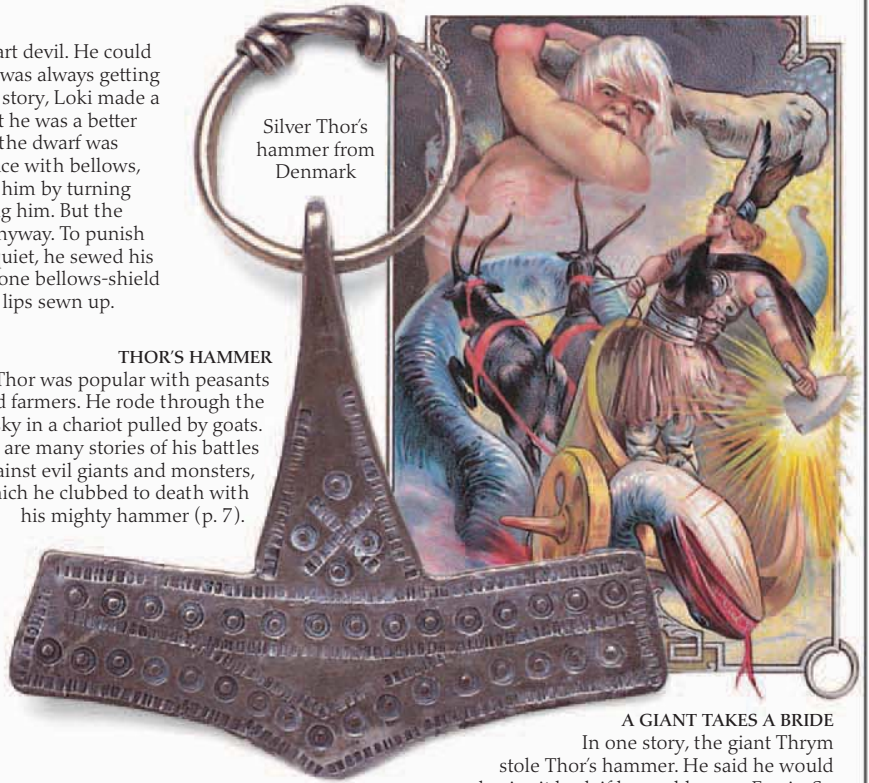
HIS LIPS ARE SEALED

Loki was part god and part devil. He could change his shape, and was always getting into mischief. In one story, Loki made a bet with a dwarf that he was a better metalworker. While the dwarf was heating up the furnace with bellows, Loki tried to distract him by turning into a fly and stinging him. But the dwarf won the bet anyway. To punish Loki and keep him quiet, he sewed his lips together. This stone bellows-shield shows Loki with his lips sewn up.



A HERO'S WELCOME

The Valkyries were warrior women who searched the battlefields for dead heroes. They carried warriors who had died bravely to Valhalla, the Viking heaven. Here Odin welcomed the dead heroes, joining them in feasts in the great hall every evening.



Silver Thor's hammer from Denmark

THOR'S HAMMER

Thor was popular with peasants and farmers. He rode through the sky in a chariot pulled by goats. There are many stories of his battles against evil giants and monsters, which he clubbed to death with his mighty hammer (p. 7).

A GIANT TAKES A BRIDE

In one story, the giant Thrym stole Thor's hammer. He said he would only give it back if he could marry Freyja. So Thor dressed up as Freyja and went to the ceremony. He nearly gave himself away by drinking too much! When Thrym brought out the hammer to bless the bride, Thor grabbed it and killed him and all the giant guests.

Dead warrior

Curved roof of Valhalla

Valkyrie (left) and a man with an ax (right)

Valkyrie with drinking horn greets a dead hero

Runic inscription

Sail and rigging



WATERFALL OF THE GODS

In Iceland, gods were worshipped at Godafoss, which means waterfall of the gods.

Hero riding the eight-legged horse Sleipnir arrives in Valhalla



TEARS OF GOLD

Freyja married a god named Od, who left her. All the tears she wept for him turned to gold. In this romantic picture, she is searching the sky for him in a chariot pulled by cats.

PICTURES OF VALHALLA

A hero arrives in Valhalla on this picture stone from Gotland (p. 58). He is riding Odin's eight-legged horse, Sleipnir. A Valkyrie holds up a drinking horn to welcome him. Under the curved roof of Valhalla, another Valkyrie gives a drinking horn to a man with an ax and a dog.

Ship full of armed warriors

Viking burials

BEFORE THE COMING of Christianity, Vikings were buried with everything they would need in the next world. Traditional ceremonies varied a lot, and much is still shrouded in mystery. The wealthiest men and women were buried in ships, to carry them to the next world. These were crammed full of their belongings, from clothes and weapons to kitchen goods and furniture. Horses, dogs, even servants were killed and laid to rest with the dead Viking. The ships were then covered with mounds of earth, or set alight in a blazing funeral pyre. There are stories about burning ships being pushed out to sea, but there is no proof that this ever really happened. Other Vikings were placed in underground chambers in burial mounds. Even poor peasants were buried with their favorite sword or brooch.



BURIAL MOUND
Amazing riches have been dug out of some burial mounds. Entire ships have survived in the right soil conditions. Even when the wood has disintegrated, the ship's outlines may be left in the ground. A ship from a mound in Ladby on Fyn, Denmark, has been traced in this way. Many mounds contain burial chambers, not ships.

Strakes (planks) get narrower toward the prow



Prow ends in a snake's head

Intricate carvings of lively animals



OLD MEN

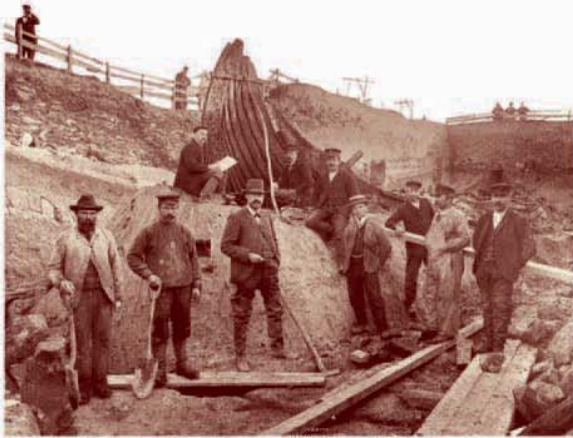
Three humanlike figures, depicted as elderly men, are shown carved inside the prow of the Oseberg ship. They have long, wispy beards and seem to be a human version of the gripping beast (p. 37).

Twelve strakes, each overlapping the one below

Stem-post is a single piece of fine oak, joined to the keel at the base

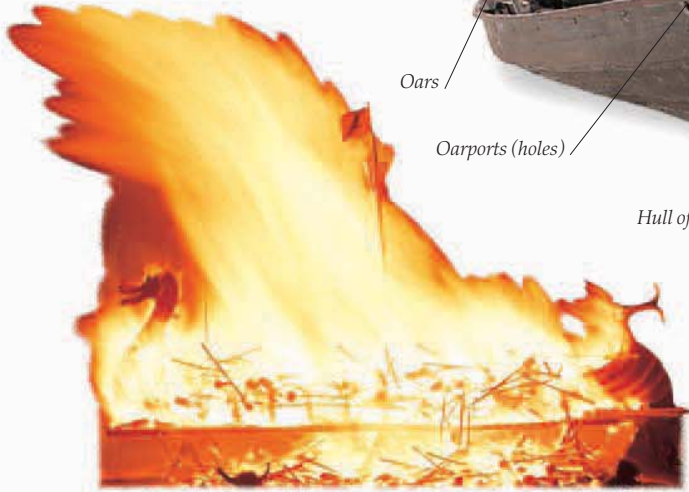
THE OSEBERG SHIP

The most beautiful Viking ship of all is the Oseberg ship. It was discovered in 1903 in a burial mound in Oseberg, near the Oslo Fjord in Norway. Like the Gokstad ship (pp. 8–9), it had been preserved by the soggy blue clay of the fjord. This is the fine oak prow, or stem-post. It is a modern copy, because only fragments of the original were left in the mound. Like the stern-post, it is carved with a brilliant array of animals and people. The prow ends in a curling snake's head, and the tip of the stern is the snake's tail. The ship is 70 ft 6 in (21.5 m) long and has 15 oarports (holes for holes) on each side. As many as 30 men were needed to row it. But the Oseberg ship is a frail vessel that couldn't have sailed the open ocean. It was probably only used for state occasions or for sailing up and down the coast. A mass of ship's equipment, including a gangplank, bailing bucket, mast, rudder, steering oar, anchor, and 15 pairs of oars, was found inside.



REBUILDING THE OSEBERG SHIP

The Oseberg burial mound was 144 ft (44 m) long and 20 ft (6 m) high. It was excavated in the summer of 1904. The ship inside was in a bad condition. It had been filled with heavy stones, which had broken the wood into thousands of fragments. Each fragment was numbered, washed, and protected with preservatives. Then the ship was painstakingly put back together, piece by piece.



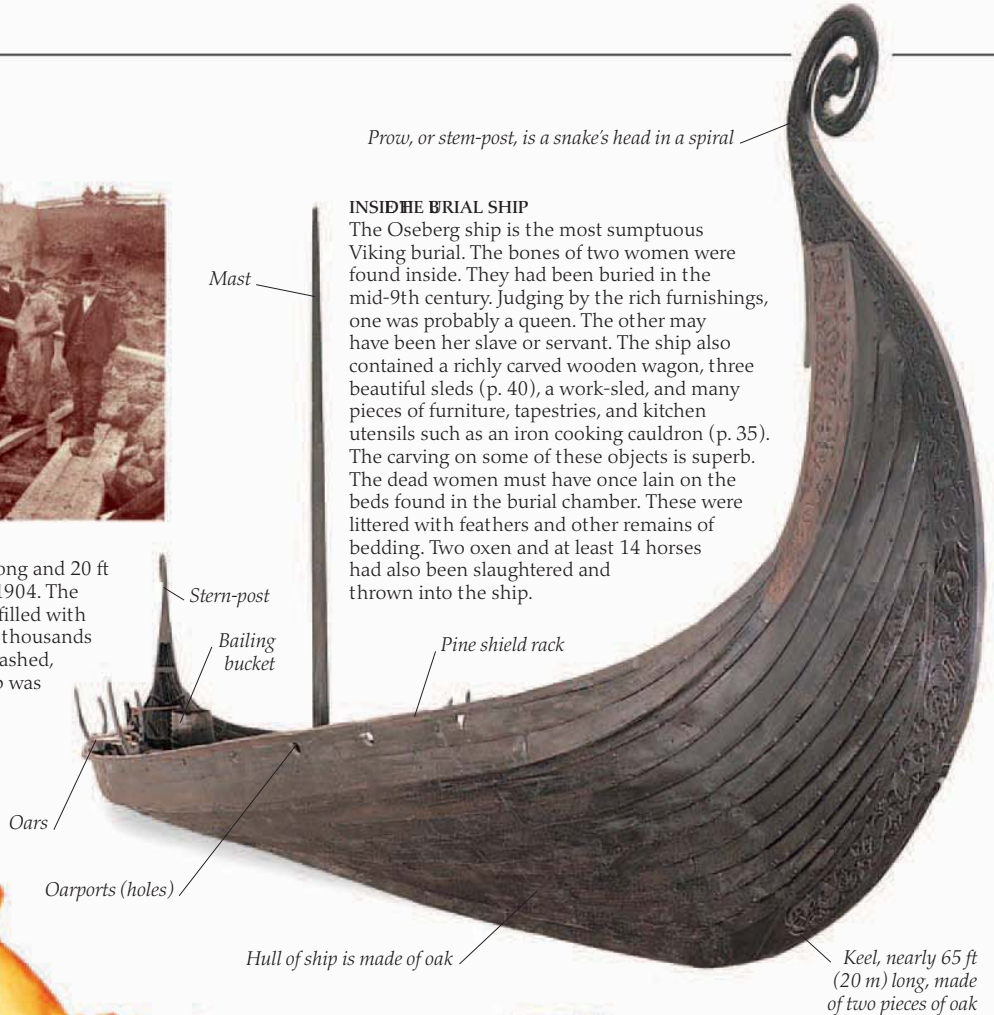
WE BURN HIM IN A MOMENT

This is a reenactment of a Viking funeral pyre. The Arab traveler Ibn Fadhlān (pp. 19, 47) saw a Viking chieftain's funeral in Russia in 922. The dead man was dressed in beautiful clothes and seated in the ship, surrounded by drinks, food, and weapons. Then various animals and finally a woman were killed and laid in the ship with him. Finally, the ship was set on fire. Ibn Fadhlān was told: "We burn him in a moment and he goes at once to paradise."

Prou, or stem-post, is a snake's head in a spiral

INSIDE THE BURIAL SHIP

The Oseberg ship is the most sumptuous Viking burial. The bones of two women were found inside. They had been buried in the mid-9th century. Judging by the rich furnishings, one was probably a queen. The other may have been her slave or servant. The ship also contained a richly carved wooden wagon, three beautiful sleds (p. 40), a work-sled, and many pieces of furniture, tapestries, and kitchen utensils such as an iron cooking cauldron (p. 35). The carving on some of these objects is superb. The dead women must have once lain on the beds found in the burial chamber. These were littered with feathers and other remains of bedding. Two oxen and at least 14 horses had also been slaughtered and thrown into the ship.



Hull of ship is made of oak

Keel, nearly 65 ft (20 m) long, made of two pieces of oak

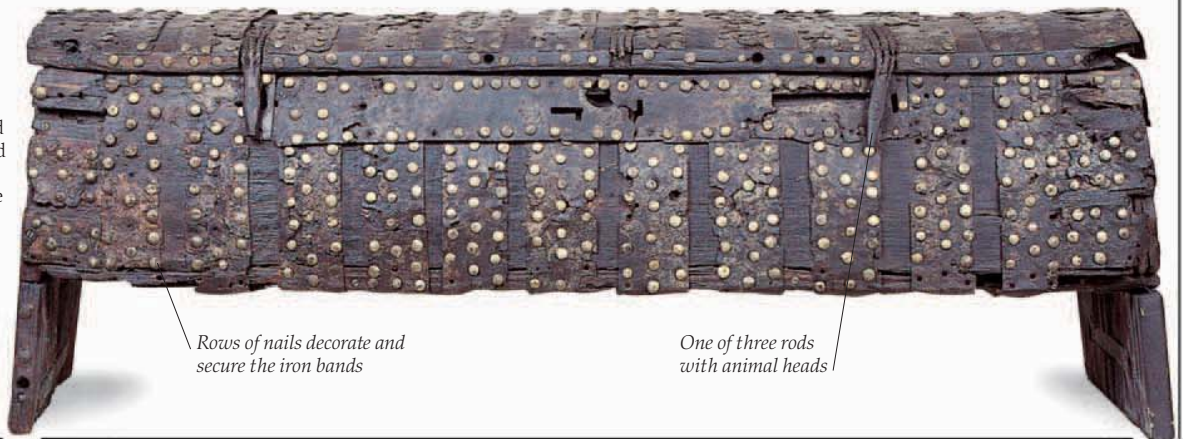


BRIERROOCH

No jewelry was found in the Oseberg ship, because the mound had been robbed long ago. But this bronze brooch was found in a woman's grave nearby. It is in the shape of an exotic animal with an arched head. The style is very similar to some of the Oseberg wood carvings.

BURIAL CHEST

The burial chamber of the Oseberg ship contained the fragments of many wooden chests. This is the best preserved one. It is made of oak and decorated with broad iron bands. The elaborate locking system includes three iron rods that end in animal heads. The chest was full of tools, which the dead woman may have needed to repair her vehicles in the next world.



Rows of nails decorate and secure the iron bands

One of three rods with animal heads

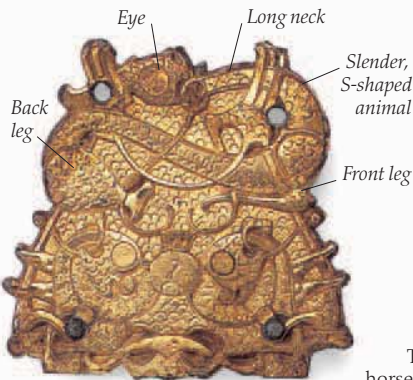
Buried treasure

Vikings were buried with all kinds of treasures. These are known as grave goods. They are usually the finest or favorite belongings that the dead man or woman owned or wore. Other grave goods were specially made, just for the burial. Grave goods give many glimpses of the Viking way of life: of how people cooked or sewed; of their furniture, dress, and jewelry; and of the tools and weapons they used every day.

Whole mount is shaped like an animal's head and neck



Two animal heads in profile, staring snout to snout



Face of an animal, perhaps a lion



Tangle of legs



BEAUTIFUL BRIDLE BITS

These five glittering mounts are part of a horse's bridle. They date from the late 8th century. They were found with 17 others in a rich man's grave at Broa in Gotland, Sweden. Made of bronze coated with gold, they are decorated with masses of intricate animals and birds, some twisting in slender ribbons, others plump and gripping everything in sight (p. 37).

Cast-bronze handle

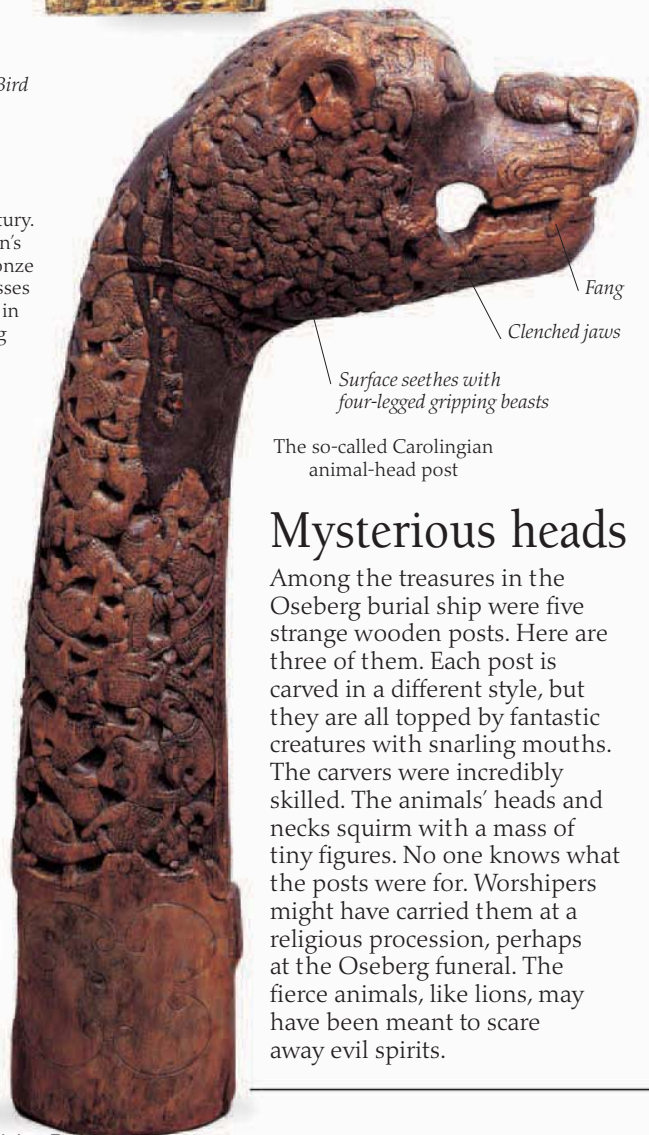


Spiral patterns engraved on bronze sheets

DRINKS BUCKET
Made in northern England or Scotland, this bucket was buried in a woman's grave in Birka, Sweden, around 900. It is made of birch wood covered in sheets of bronze. The bucket was probably used for serving drinks.

Head of a person or animal

Paw



Fang
Clenched jaws
Surface seethes with four-legged gripping beasts

The so-called Carolingian animal-head post

Mysterious heads

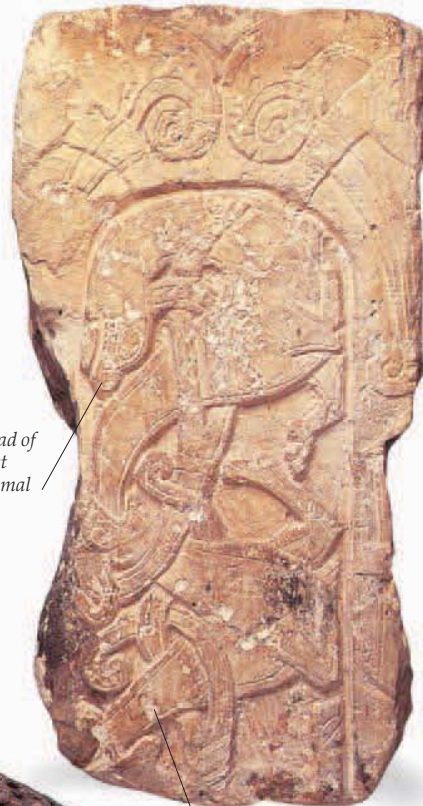
Among the treasures in the Oseberg burial ship were five strange wooden posts. Here are three of them. Each post is carved in a different style, but they are all topped by fantastic creatures with snarling mouths. The carvers were incredibly skilled. The animals' heads and necks squirm with a mass of tiny figures. No one knows what the posts were for. Worshipers might have carried them at a religious procession, perhaps at the Oseberg funeral. The fierce animals, like lions, may have been meant to scare away evil spirits.



SHIPS IN STONE

Only the very rich could afford a real ship to carry them to the next world. Other Vikings had their graves marked with raised stones in the shape of a ship. These ship settings are common all over Scandinavia. This is one of a whole fleet of ships in the big graveyard at Lindholm Høje in Jutland, Denmark.

THE ENGLISH WAY
 In their homes in Scandinavia, the Vikings raised huge memorial stones to remember dead friends or relatives (pp. 58–59). These stood in public places, often far from the dead person's grave. But in their colonies in England, the Vikings adopted the native custom of gravestones. This fragment of a stone from Newgate (near York) is decorated with two animals, one devouring the other. Traces of red paint show that it was once brightly colored.



Head of first animal

Second animal swallowing the first



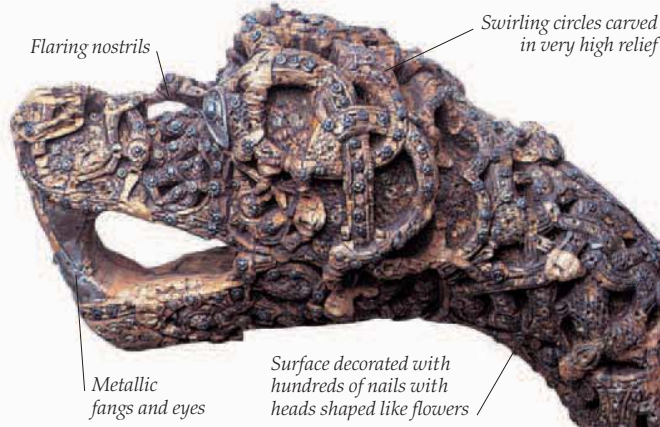
PLANTS AND ANIMALS
 These twisting figures decorate an 11th-century English gravestone. Two animals with S-shaped bodies form a figure-eight pattern. Plant leaves and shoots sprout from their snaky bodies.

Large glaring eyes

Swirling circles carved in very high relief

Two elegant, intertwining animals

Open jaw with large bared teeth



Flaring nostrils

Metallic fangs and eyes

Surface decorated with hundreds of nails with heads shaped like flowers

The First Baroque animal-head post



The Academician's animal-head post

All five posts had long wooden planks attached to their bases with wooden dowels



VIKING SOAP OPERA

This romantic painting shows the funeral pyre of Sigurd the dragon-killer (pp. 51, 58) and Brynhild (p. 30). In the legend, Sigurd was in love with Brynhild. But he married another woman instead and tried to trick Brynhild into marrying his brother-in-law, Gunnar. Brynhild was so angry that she had Sigurd killed. Overcome with grief, she stabbed herself and joined Sigurd on his funeral pyre.

Runes and picture stones

VIKINGS CELEBRATED BRAVERY in battle and the glory of dead relatives by raising memorial stones. These were carved with pictures and writing in runic letters (runes), often inside an intricate border of snakes. Some stones were raised by people who wanted to show off their own achievements. Others tell of loved ones who died on far-off voyages. The stones were set up in public places where many people could stop and admire them. The unusual picture stones from the island of Gotland often have no runes. But they are crowded with lively scenes of gods, ships, and warriors.

A JUMBLE OF PICTURES

This picture stone from Ardre, Gotland, is a hodge-podge of pictures. But several stories can be seen. At the top, Odin's mysterious eight-legged horse, Sleipnir, carries the god across the sky. Below is a Viking ship, surrounded by episodes from the bloody story of Völund the blacksmith. He was taken prisoner by King Nidud. In revenge, Völund cut off the heads of both of the king's sons and made their skulls into cups. In the end, Völund escaped by forging a pair of wings and flying away. The small boat below the ship may be the god Thor fishing with the giant Hymir. According to the legend, Thor caught the World Serpent. But Hymir was so terrified that he cut the line.

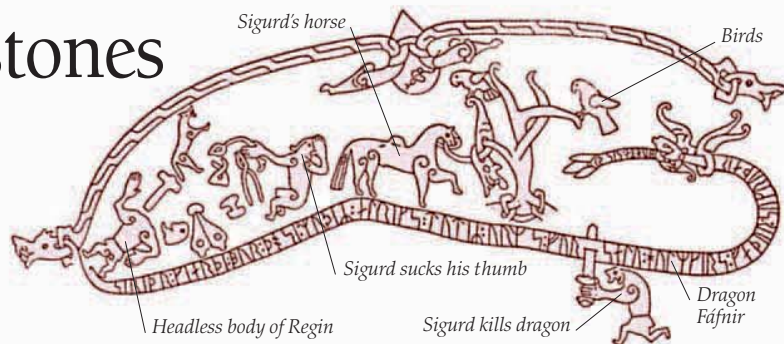
Ship full of warriors, with a large rectangular sail

Possibly Thor and Hymir fishing from a small boat

The bird may be Völund flying away

Two figures fishing

Many other pictures cannot be identified with certainty



SIGURD THE DRAGON KILLER
The complete legend of Sigurd (p. 51) is carved on a great rock at Ramsund in Sweden. The carver has cleverly placed clues about all the episodes into the frame made of snakes. He has also turned one of the serpents into the dragon Fáfnir.



Warrior killed in battle

The eight-legged horse Sleipnir carries Odin through the sky

The large piece of limestone was carved and painted in the 8th century

Interlace border

Headless bodies of the king's two sons

Völund's forge with his hammer and tongs

Wild beast, perhaps a wolverine

Writing in runes

Runes were easy to carve in stone or wood, with straight or diagonal lines. The basic alphabet had 16 runes. Runes were still used in Scandinavia well into the Middle Ages. The calendar stave from Sweden (above) shows how they developed.

Medieval calendar stave (staff) carved with 657 different symbols



Runes begin: "Hart's horn..."

INSCRIBED ANTLER

Bills, accounts, even love messages were written in runes on sticks. Part of this deer's antler from Dublin, Ireland, has been flattened to make a space for an inscription.

Secret runes that have not yet been deciphered



SECRET RUNES FROM GREENLAND

This pine stick from around 1000 has the runic alphabet on one side. The other two sides are carved with secret and magical runes. No one knows what they mean.



THORFAST'S COMB

Everyday objects were sometimes labelled in runes to declare their owner or maker. The runes on this comb case say: "Thorfast made a good comb."



FUTHARK

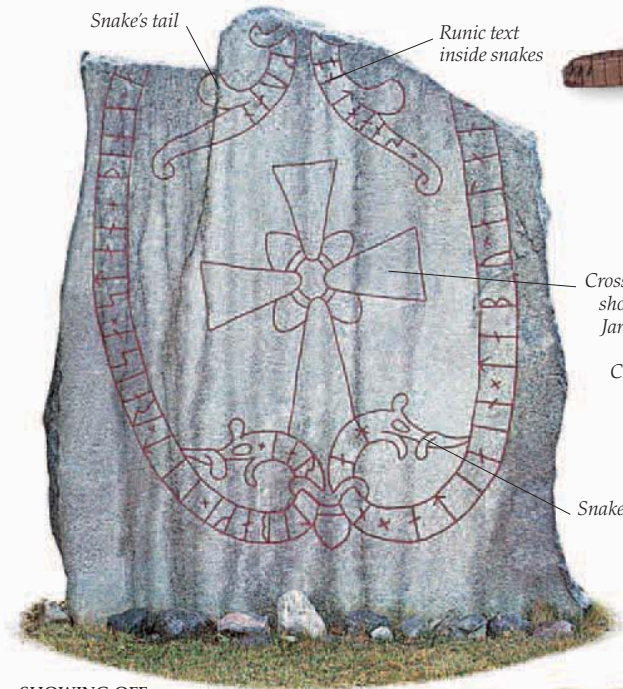
The basic runic alphabet was called *futhark*, after the first six letters. The first runic inscriptions, from around 200, are in a longer alphabet, with 24 characters. Around 800, the Viking alphabet with eight fewer runes was developed. Most inscriptions on stone were in normal runes. Another version of the alphabet was used for everyday messages on wood or bone.

Snake's tail

Runic text inside snakes

Cross, which shows that Jarlabanke was a Christian

Snake's head



SHOWING OFF

Jarlabanke was a wealthy 11th-century landowner who thought a lot of himself. He built a roadway over marshy land at Tåby in Sweden. Then he raised four rune stones, two at each end, to remind travelers of his good deed. He also had this stone erected in the churchyard of Vallentuna, a village nearby. The runes say: "Jarlabanke had this stone raised in memory of himself in his lifetime, and made this Thing place, and alone owned the whole of this Hundred." The "Thing place" was the spot where the assembly for the district met (pp. 28–29). A Hundred was the area governed by a Thing.

SAINT PAUL'S STONE

In 1852, the end slab of a splendid tomb was found in the churchyard of St. Paul's Cathedral in London, England. The whole tomb must have been shaped like a box. This is a color painting of the great beast (p. 60) that decorates the slab. The colors are based on tiny traces of pigment found on the stone. The beast is very dynamic, twisting and turning around a smaller animal. The decoration shows that it was carved in the 11th century. The runes on the edge of the slab say: "Ginna and Toki had this stone set up." These two may have been warriors in Cnut the Great's army. Cnut became King of England in 1016 (p. 63).



The Jelling Stone

THE GREATEST STONE MONUMENT in Scandinavia is the Jelling Stone. It was raised by King Harald Bluetooth at the royal burial place of Jelling in Jutland, Denmark. Beside the stone are two huge mounds. One of these, the North Mound, may be where Harald's parents, King Gorm and Queen Thyre, were buried in a traditional ceremony (pp. 54–57). When Harald became a Christian, he built a church next to the mounds and had his parents reburied inside. Then he raised the Jelling Stone in their memory. The memorial also advertised his own power as king of Norway and Denmark. This a modern copy of the stone. It is a three-sided pyramid, with a long inscription on one side and pictures on the other two.

Original stone is a single, massive boulder of red-veined granite

Runes here continue from the inscription on the first side, reading: "...and Norway..."



FLVER MONT

King Gorm may have worn this mount on his belt. It was found in a grave in the church in Jelling, among the reburied bones of a man, probably Gorm.



Two entwined ribbonlike animals

GORMSCUP

This silver cup, usually known as the Jelling Cup, was found in the North Mound. It is no bigger than an eggcup. King Gorm may have drunk fruit wine from it. The cup is decorated with ribbonlike animals that gave their name to a style of Viking art, the Jellinge style.

The great beast, a wild animal with sharp claws and a long tail

The beast is entwined in the coils of a huge snake

Ribbonlike decoration in the Mammen style, a development of the Jellinge style seen on the cup, with the ribbons based on plants rather than animals

GREAT BEAST

One side of the stone is carved with a snake twisting and turning around a great animal. Their struggle may represent the battle between good and evil. The animal could be a lion, but it is often just called the great beast.

It became a popular image in Viking art and can be seen on weather vanes (p. 9) and rune stones like the St. Paul's Stone (p. 59)



A ribbon forms a border to the carving

These bright colors are only a guess, because the original pigment has disappeared

Halo, a symbol of Christ's holiness

Christ with outstretched arms

Plant leaves and shoots spring from the ends of the ribbon

Horizontal lines of runes cut into the stone



HARALD'S INSCRIPTION

One side of the Jelling Stone is covered in runes. They read: "King Harald commanded this memorial to be made in memory of Gorm, his father, and in memory of Thyre, his mother—that Harald who won the whole of Denmark for himself ..." The inscription continues beneath the great beast and finishes below Christ.

More plantlike ribbons wrap around Christ

Harald's inscription ends beneath the figure of Christ with: "...and made the Danes Christian."

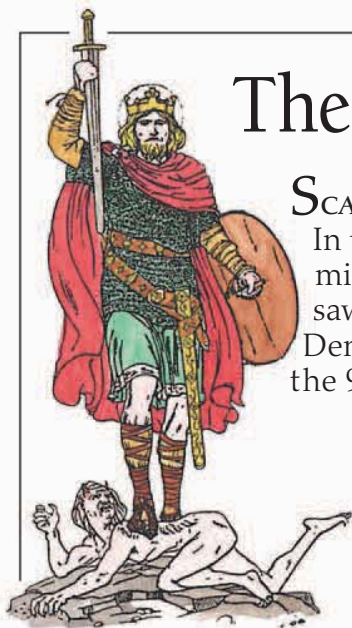
Carvings are in low relief

BEARDED CHRIST

The third side of the stone is carved with the oldest picture of Christ in Scandinavia. Christ's arms are outstretched, as if he were on the cross, but no cross is actually shown. Harald was converted to Christianity around 960. He was influenced by a miracle performed by the monk Poppo. But he also converted for political reasons, to strengthen his kingdom and to make sure that Denmark could trade with Christian countries.

The coming of Christianity

SCANDINAVIA WAS SURROUNDED by Christian countries. In the late 10th century, Viking kings started supporting missionaries from England and Germany, because they saw Christianity as a way to strengthen their power. Denmark was converted under King Harald Bluetooth in the 960s. Norway followed early in the 11th century. In Sweden, traditional beliefs survived until the end of the 11th century. By the 12th century, Viking raids had ended. The Scandinavian countries united under strong kings who did not encourage the kind of raiding in which the Vikings had once indulged. Meanwhile, the countries that had been the subject of Viking attacks, such as France and England, themselves became more united. The Vikings gradually disappeared from the scene.

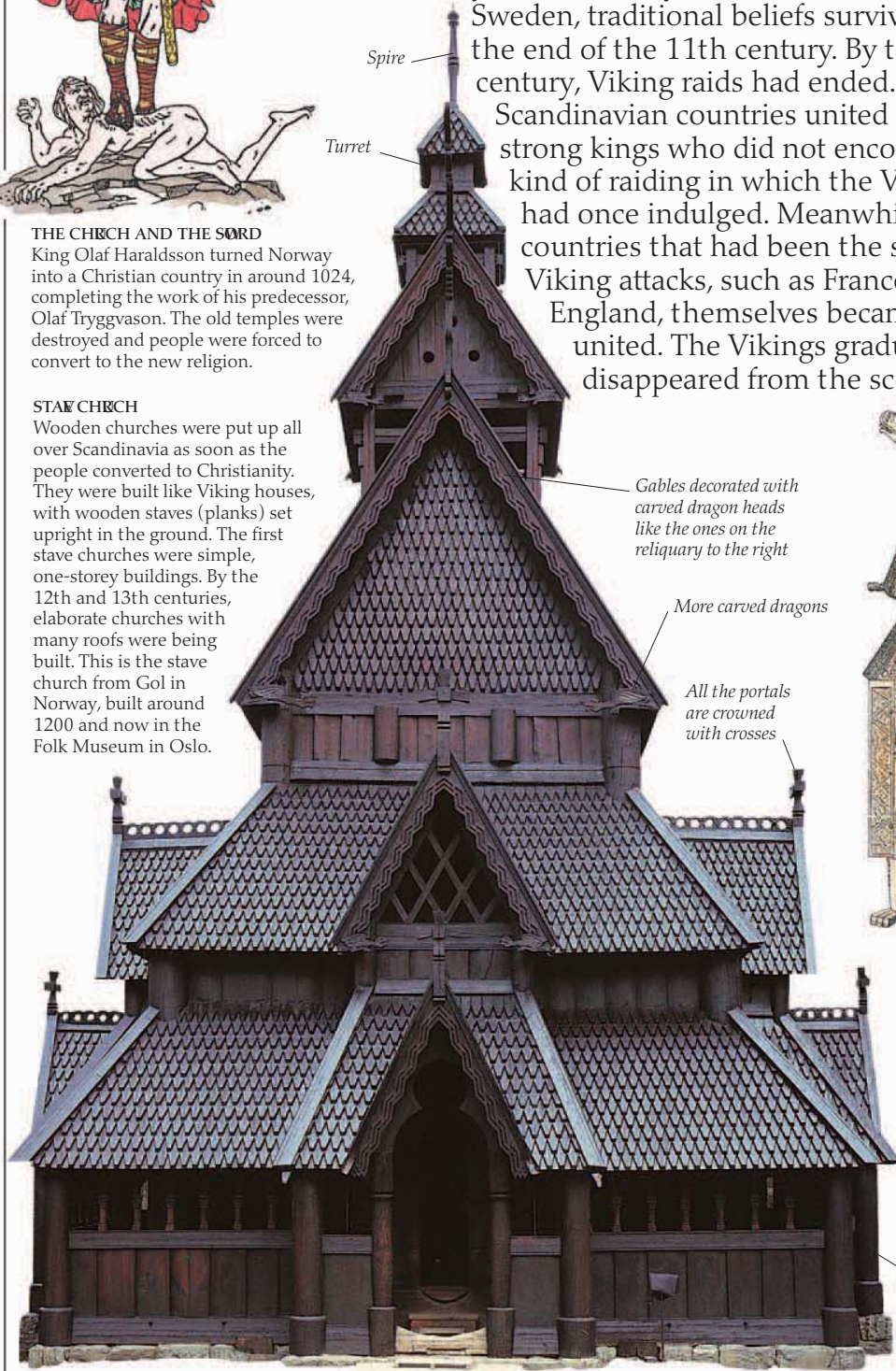


THE CHURCH AND THE SWORD

King Olaf Haraldsson turned Norway into a Christian country in around 1024, completing the work of his predecessor, Olaf Trygvason. The old temples were destroyed and people were forced to convert to the new religion.

STAVE CHURCH

Wooden churches were put up all over Scandinavia as soon as the people converted to Christianity. They were built like Viking houses, with wooden staves (planks) set upright in the ground. The first stave churches were simple, one-storey buildings. By the 12th and 13th centuries, elaborate churches with many roofs were being built. This is the stave church from Gol in Norway, built around 1200 and now in the Folk Museum in Oslo.



Spire

Turret

Gables decorated with carved dragon heads like the ones on the reliquary to the right

More carved dragons

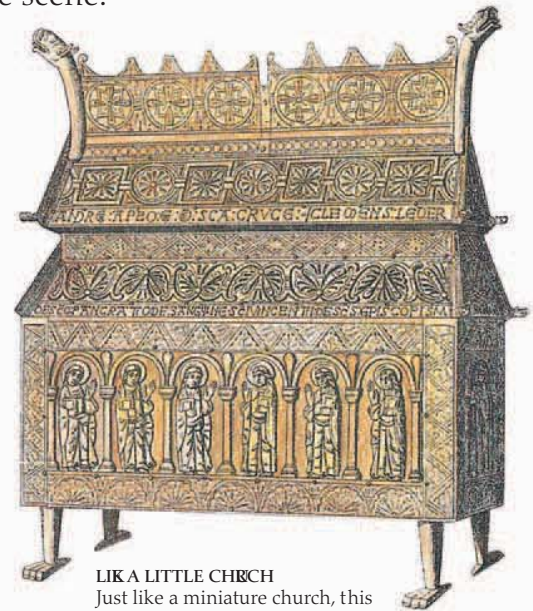
All the portals are crowned with crosses

Roofed-in verandah that runs all around the church



RESURRECTION EG

This colorful egg was a symbol of Christ's resurrection. It was made in Russia and may have been brought to Sweden by Russian missionaries.



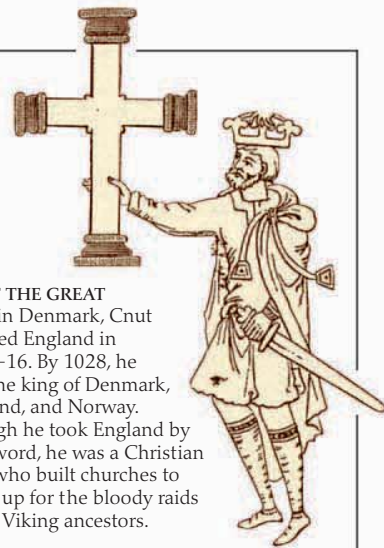
LIKA LITTLE CHURCH

Just like a miniature church, this little shrine or reliquary is decorated with dragon heads. Reliquaries were built to hold holy Christian relics. This one was made for Eriksberg church on Gotland, Sweden, in the late 1100s. Four little animal paws hold it up. The reliquary glitters with a thin layer of gold, over its frame of carved wood. It probably once held bones or fragments of cloth that people believed came from the body or clothes of a saint.



BAPTIZED
Baptism in water was a true sign of conversion to Christianity. People wore the white baptismal clothes for a week after the ceremony.

CHRIST THE TRIUMPHANT KING
The most powerful symbol of Christianity is Christ on the cross. Even before they converted, Viking traders often wore crosses so that they could travel freely through Christian lands. Scandinavian artists interpreted the cross in their own way. This crucifix comes from Åby in Jutland, Denmark. It is made of carved oak covered in sheets of gilded copper. Christ is shown as a king wearing a crown. His eyes are wide open, and only his hands have nail holes. He looks triumphant, not suffering.



CNUT THE GREAT
Born in Denmark, Cnut invaded England in 1015–16. By 1028, he was the king of Denmark, England, and Norway. Though he took England by the sword, he was a Christian king who built churches to make up for the bloody raids of his Viking ancestors.



Collar

Hair hangs down in long braids

Only the hands are nailed to the cross

Knee-length tunic tied in place with cords



Early Scandinavian cross from Birka in Uppland, Sweden



Cross

Thor's hammer

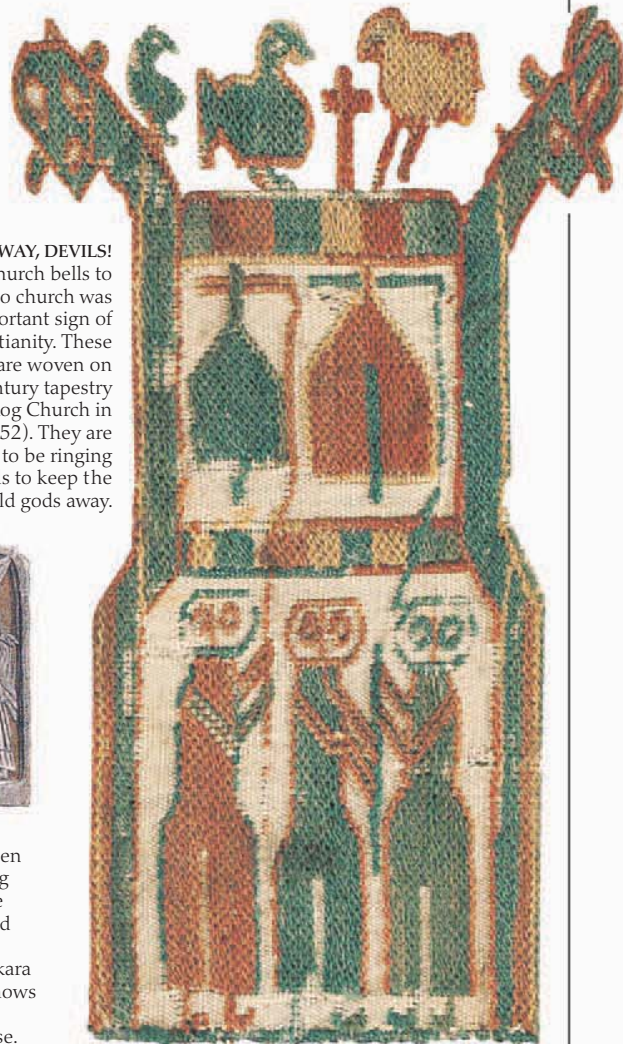
Cross

BEST OF BOTH WORLDS
Belief in the old gods did not die out overnight. This stone mold from Himmerland in Denmark shows that craftsmen were happy to make Thor's hammers and Christian crosses at the same time. Many Christian Vikings kept their faith in Thor, just in case.

AWAY, DEVILS!
Ringing church bells to call people to church was an important sign of official Christianity. These bell-ringers are woven on a 12th-century tapestry from Skog Church in Sweden (p. 52). They are thought to be ringing the bells to keep the old gods away.





ADAM AND EVE
Scandinavian craftsmen soon started depicting scenes from the Bible as well as dragons and Viking legends. This stone carving from Skara Church in Sweden shows Adam and Eve being expelled from Paradise.




Did you know?


FASCINATING FACTS


 The Vikings came from all over the region that is now modern-day Scandinavia (Sweden, Norway, and Denmark). There was no unity between the Vikings: they fought each other as fiercely as they fought their enemies.


 The word Viking may come from *vikingr*, meaning pirate, or from Viken, the area around the Oslo fjord in Norway. The Vikings were also known as norsemens (men from the north) and even ashmen (from the wood they used to build their ships).


 The Vikings' skill at metalworking helped their society to advance. The sharp axes they produced allowed them to cut down vast


amounts of wood for building ships and constructing houses. On the land that was left clear, the Viking farmers were able to grow plentiful crops.


 In 1936, a Viking craftsman's chest was discovered in Sweden. It contained astoundingly modern-looking implements used for metalworking and carpentry, including tools fashioned in different sizes for fine and heavy work.


 Because the Vikings coped so well with their surroundings, their culture flourished, and coastal settlements became overcrowded. These conditions may have encouraged the first adventurers to set off in their splendid ships to find new lands.


 In parts of Sweden, many modern farms are still called *Smiss* (the smith's farm), because traditionally Viking farmers were also skilled craftsmen (smiths) who spent the winter traveling the countryside peddling their wares.


 Viking farmers kept their livestock (mainly cows, sheep, and pigs) inside during the harsh winter months so that humans and animals could help to keep each other warm.


 Norwegian archeologists have discovered a Viking house with an ingenious cavity-wall construction: a dry-stone outer skin, an inner lining of vertical planks, and a gap between them stuffed with grasses and moss for insulation.

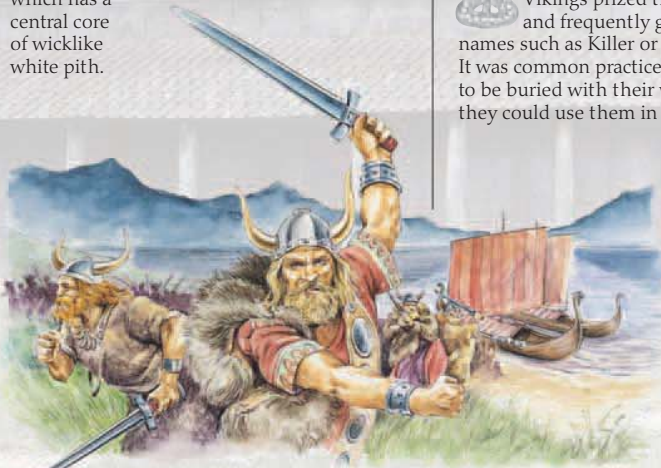
 Viking families often lit their homes with torches made from bundles of marsh grass called *lyssiv*, or light straw, which has a central core of wicklike white pith.

 In the late 9th century, the Midlands and north of England was settled by Danes. The area became known as the Danelaw, with its own distinctive laws and customs. Place names ending in -by and -thorp are evidence of Viking colonization.


 Our word Thursday has its roots in Thor, the Viking god of thunder and lightning. Friday is named after Frigg, wife of the most powerful god, Odin.


 Viking swords were very distinctive, with steel blades, and iron guards and pommels inlaid with silver, copper, and brass. Their basic design, however, was copied from weapons made in Rhineland (modern Germany) to the south.

 Vikings prized their swords and frequently gave them names such as Killer or Leg-biter. It was common practice for warriors to be buried with their weapons so they could use them in the afterlife.





Vikings on Conquest, 21st-century watercolor by Johann Brandstetter


 Early Viking raiders would arrive at a new land in the spring, spend the summer looting, then sail home for the winter.

 When Viking marauders landed, the local people would sometimes offer bribes in exchange for peace. In 911, Normandy in France was given to a Viking army under these circumstances.

Viking ship by the 20th-century artist Christopher Rave

 Vikings despised weakness, even in children and babies. Sickly newborns who might be a burden on the family were often thrown into the sea or left outside to perish.

 Shakespeare's *Hamlet* was based on a character that first appeared in *Gesta Danorum*, a collection of ancient Viking tales. These were written down in the late 12th century by the Danish chronicler Saxo Grammaticus.

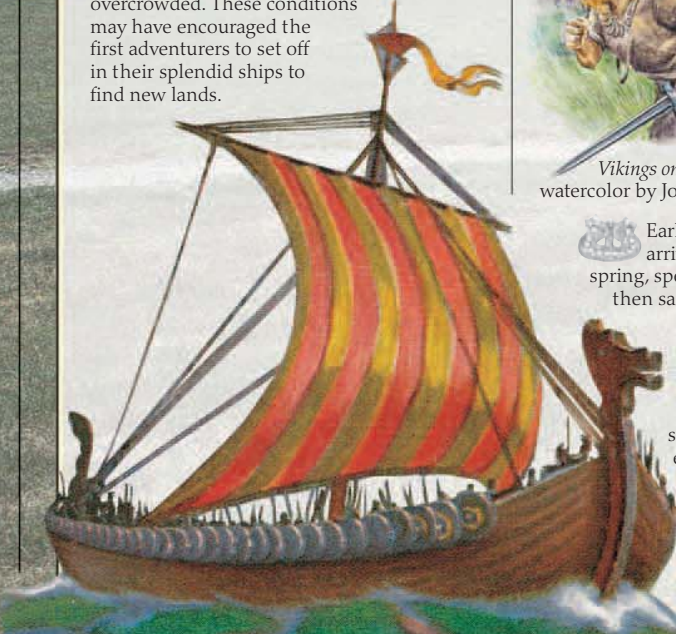
 Because few people could read, it was the custom at the governing assembly for the Law Speaker to recite all the existing laws once a year.



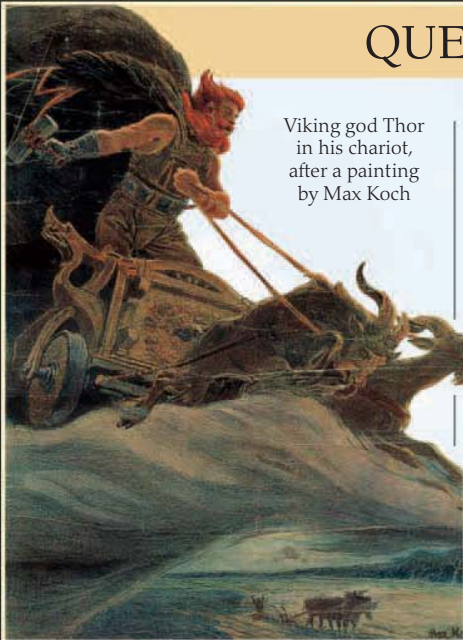
Viking sword



Ornamental ax head



QUESTIONS AND ANSWERS



Viking god Thor in his chariot, after a painting by Max Koch

Q How religious were the Viking people?

Religious faith was very important to the Vikings, since it helped them to survive in a frightening world. In their mythology, for example, the souls of those who died from sickness or old age went to a shadowy, sinister domain, while warriors who died in combat would be taken to Valhalla (heaven) to feast and engage in mock battles. Similarly, the Vikings considered the Norns—the Fates of Destiny—to be more powerful than gods and goddesses, a belief that may also have made an extremely harsh existence easier to bear.

Q What role did women play in Viking society?

Aside from the fact that most marriages were arranged by the couple's parents, women had a considerable amount of power and status. When their husbands were away on raids or explorations, they were left to run the farms, so they were capable and strong-willed. Once they were married, they could hold their own land. Until the Vikings converted to Christianity, a wife was free to divorce her husband at will; if she left with the children, she was entitled to half her husband's wealth. A husband who left his wife was obliged to pay her compensation. Wives of chieftains and freemen (though not of slaves) were even allowed to contribute to political and legal debates.

Q Do any of our important customs come from the Vikings?

Our traditional Christmas celebration is largely rooted in Viking culture. While many pagan societies enjoyed a midwinter festival, the Vikings actually exchanged presents at the winter solstice. What's more, they believed that their gods flew through the night sky carrying gifts in their chariots—an image uncannily like that of Santa Claus in his airborne sleigh.

Q Was equality valued in Viking culture?

Although Vikings kept slaves (mostly captured abroad), status in society was based as much on ability and acquired wealth as on noble parentage. Although a son could inherit a lofty position from his father, a warrior of lowly birth could improve his social standing considerably just by acquiring wealth and impressive plunder on a succession of foreign raids.

Viking woman spinning



Raw wool ready for spinning

Q When Viking adventurers left their homes for months at a time, in what kind of conditions did they live?

Although life at sea and in temporary camps was fairly primitive, it appears that the Vikings were not completely without comfort. From the Oseberg burial-ship site, archeologists unearthed a large carved bed clearly designed to be taken apart and stored on board ship for use as a kind of camp bed when the Vikings reached a new settlement.

RECORD BREAKERS



FIRST ARRIVALS

The first Europeans to colonize North America were Vikings, who landed in Newfoundland, Canada, in about 1001, nearly 500 years before Christopher Columbus made his famous journey.



FROSTY WELCOME

Vikings were also the first to settle in Iceland, arriving in 870. By 930, the fertile green coastal areas were densely populated.



BURIAL GROUND

The Viking cemetery in Lindholm Høje, Denmark, is one of the largest in the world, containing almost 700 graves, all marked with large stones.



PIONEERING TRADERS

It was the Vikings who opened up many important international trades routes to places such as western Russia, the Mediterranean coast, northern India, and even the Middle East.



Picture stone from Gotland, Sweden

Who's who?

THE LEADING FIGURES in the Viking world tend to fall into one of three categories: rulers (at home and abroad), who held the power and made the laws; adventurers, who set off to find and colonize new lands; and writers and historians, who laid the groundwork for our knowledge of this remarkable civilization.

RULERS

- **KING GUTHRUM**

Danish ruler of East Anglia in the latter part of the 9th century. In 878, Guthrum signed the Treaty of Wedmore with Alfred the Great. This treaty divided England into two, and made Guthrum overlord of the northern lands under Alfred's theoretical control. The area controlled by the Danes became known as Danelaw.

- **ERIC BLOODAXE**

King of Norway during the 930s, Eric was expelled for extreme cruelty. He is thought to have murdered his seven brothers. Eric Bloodaxe later became the last Viking ruler of Northumbria in England.

- **KING HARALD BLUETOOTH**

Ruler of Denmark during the 10th century, Harald Bluetooth converted his country to Christianity in the 960s. A great innovator, he commissioned the first bridge in Scandinavia and the biggest and most splendid of Viking memorial stones at Jelling, in Jutland. Harald's parents, King Gorm and Queen Thyre, are thought to be buried at Jelling. Queen Alexandra, the Danish wife of the 20th-century British king Edward VII, is thought to have been descended from Harald Bluetooth.

- **KING SVEIN FORKBEARD**

Danish leader who besieged London in 994 until he was paid by King Ethelred II to withdraw. This payment was known as the Danegeld. In 1013, Svein Forkbeard returned, launching a successful invasion of England, and seizing the throne. He died in 1014 and was succeeded by his son Cnut.

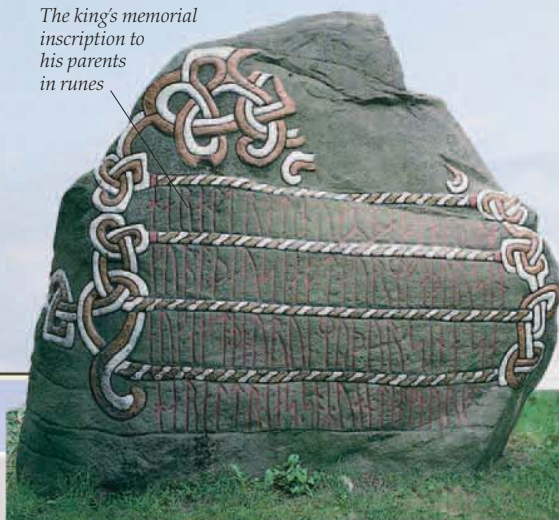


Gold brooch from the time of King Cnut

- **KING CNUT (CANUTE)**

Born in Denmark to Svein Forkbeard, the Christian King Cnut inherited his father's crowns in 1014, but was deposed in England by Saxon nobles who restored the previous king, Ethelred. When Ethelred died two years later, however, Cnut fought his son Edmund Ironside for the throne. Eventually Cnut and Edmund agreed to divide the country between them. However, Edmund died soon after, and Cnut became sole English king, as well as king of Denmark and, from 1028, of Norway. His reign was stable and prosperous, and he died in 1035, after which date his empire collapsed.

The king's memorial inscription to his parents in runes



King Harald Bluetooth's Jelling Stone

- **KING OLAF HARALDSSON (OLAF II)**

Ruler of Norway from 1015, Olaf II completed the process begun by his predecessor, Olaf I, and made Norway a Christian country in around 1024. He was killed in battle by his own chieftains, who were backed by King Cnut of Denmark. In 1164, he was declared his country's patron saint.

- **KING HARALD HARDRADA**

Harald III of Norway, known as Harald Hardrada, led a large Viking army that invaded Northumbria in England in September 1066. This army was defeated by the English king, Harold II, who was himself defeated by William the Conqueror at the Battle of Hastings in October of the same year.

- **WILLIAM THE CONQUEROR**

Leader of the Norman conquest of England in 1066, William was descended directly from Vikings who, under the chieftain Rollo, settled in northwestern France during the first part of the 10th century.



William the Conqueror in a manuscript illustration

St. Olaf, patron saint of Norway



ADVENTURERS

Rollo, Duke of Normandy, portrayed in a Victorian print



- **BJÖRN JARNSITHA**

Early Viking explorer who, with his companion Hasting, spent three years raiding lands far to the south of his homeland, including Spain, North Africa, France, and Italy.

- **RAGNAR**

Viking chieftain who conquered Paris, France, in 845. In order to reclaim the city, the French king, Charles the Bald, had to bribe Ragnar and his men with silver.

- **ROLLO**

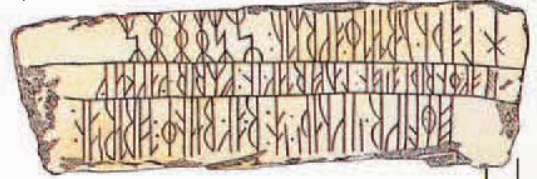
Ninth-century Viking chieftain who, with his followers, founded a settlement around present-day Rouen in France. As a result, this area became known as Normandy (Land of the Northmen).

- **IVAR THE BONELESS**

Early Viking invader who landed in England in 865, conquering East Anglia and murdering its king, Edmund, in 869 when he refused to renounce Christianity. Edmund was later canonized (made a saint), his shrine at Bury St. Edmunds becoming a place of pilgrimage.

- **ERIK THE RED**

Norwegian chieftain living in Iceland who, in 982, was accused of murder and banished. Setting off to discover new territory, he established a Norse settlement in Greenland in around 985 and encouraged hundreds of Icelanders to settle there.



Rune stone carved by Viking settlers at Kingiktorsuak, Greenland

- **LEIF THE LUCKY (LEIF ERIKSSON)**

Viking explorer and son of Erik the Red, Leif is thought to be the first European to set foot in North America, landing at the northern tip of present-day Newfoundland, Canada, in about 1001. The Vikings called the new place Vinland, which means Land of Wine.

WRITERS AND HISTORIANS

- **IBN FADHLAN**

Tenth-century Arab writer who famously described the Vikings as “the filthiest of God’s creatures.” He also left fascinating descriptions of the precious jewelry worn by Viking women and the elaborate pyre he witnessed for the funeral of one of their chieftains.



One of Jarlabanke’s four rune stones at the roadway he built in Täby, Sweden

- **SAXO GRAMMATICUS**

Danish chronicler and storyteller who lived between around 1150 and 1220. One of the stories in his *Gesta Danorum*, a collection of traditional Viking folk tales, is thought to have inspired *Hamlet*, William Shakespeare’s play about a Danish prince.

- **JARLABANKE**

Wealthy Swedish landowner and self-promoter who lived during the 11th century. The elaborate rune stones he erected in his own honour provide us with unique details about the region where he lived (called a Hundred) and the local assembly (or Thing) that governed it.

- **KING ALFRED THE GREAT**

An Anglo-Saxon king who defeated the Vikings in England, Alfred contributed greatly to our knowledge of Viking history by instigating the *Anglo-Saxon Chronicle*. This is a detailed history of England that covers the period of Viking invasion and domination.

Statue of Alfred the Great, which stands in his birthplace of Wantage, Oxfordshire



Find out more

MANY MUSEUMS WORLDWIDE have exhibits on Viking culture. The best ones, however, are usually found in the places where the Vikings lived and in the lands they conquered. Specialized museums on archeology (the study of human antiquities) or anthropology (the study of people) are likely to have the most exhibits on display, and they may also have good libraries and bookstores with further information. One such museum is the Viking Ship Museum in Roskilde, Denmark. Visitors can view five types of ship, which all sank in around 1000 and were excavated in 1962. Nearby are the Roskilde Museum, which is full of Viking documents and artifacts, and the Lejre Historico-Archaeological Research Center, which has a re-created iron-age village, complete with gardens, workshops, and animals.



MODEL MUSEUM

Visitors to the Viking Ship Museum in Roskilde are encouraged to learn how the Vikings constructed their craft by watching scale models being made. Produced by skilled local boat builders, these models are authentic in almost every detail.

TRIPS IN TIME

In addition to scale models, full-sized replicas of Viking longships are built at Roskilde. During the summer months, they take interested visitors on both short sailing trips and extended excursions along old Viking routes.



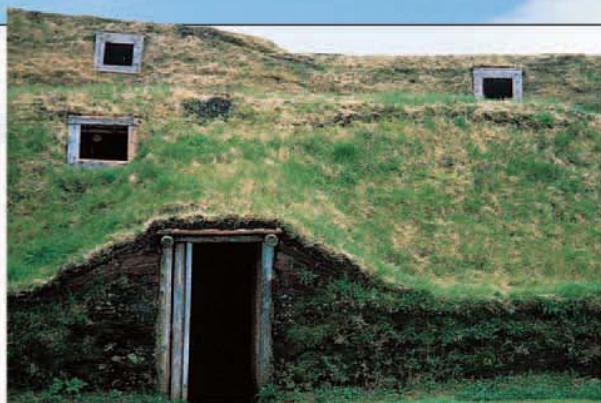
ILLUMINATING THE PAST

Like many up-to-date visitor facilities, the Roskilde Museum uses imaginative displays and models to bring the culture of the ancient world to life. Roskilde was the original capital of Denmark.

RINGS OF GOLD

Because the Vikings were so well traveled, many large museums have impressive displays of their artifacts and jewelry. These rare gold rings come from the British Museum in London.





Reconstructed Viking dwelling at L'Anse aux Meadows, Canada

VINLAND UNEARTHED

Although Vikings landed in Newfoundland, Canada, during the 10th century, it was not until the 1960s that the site of their settlement was discovered at a fishing village called L'Anse aux Meadows. (The name is an anglicized version of the French *L'Anse-aux-Méduses*—Jellyfish Bay.) Viking houses here, like those in Iceland, had timber frames covered with layers of turf.



GODS AND LEGENDS

The images on this 11th-century picture stone illustrate ancient Norse legends about the god Odin and members of his family. The stone is in the Museum of National Antiquities in Stockholm, Sweden.

TREASURES FROM ABROAD

Although this graceful glass vessel (in the collection of the Museum of National Antiquities in Stockholm) was found in a Viking grave in Scandinavia, it would originally have come from an area farther south, in present-day Germany.



USEFUL WEBSITES

- Jorvik Viking Centre website www.jorvik-viking-centre.co.uk
- Viking website of the BBC, featuring games, essays, and a tour Musof a Viking farm www.bbc.co.uk/history/ancient/viking
- Website of The Vikings, a re-enactment society with members in the United States and Europe www.vikingsna.org
- Viking website at the British Museum www.britishmuseum.org/explore/online_tours/europe/the_vikings/the_vikings.aspx
- Viking Ship Museum, Roskilde www.vikingskibsmuseet.dk
- Vikings: the North Atlantic Saga, a virtual exhibit created by the Smithsonian's Museum of Natural History www.mnh.si.edu/viking/start/html

Places to visit

L'ANSE AUX MEADOWS, NEWFOUNDLAND, CANADA

A reconstruction of three buildings at this Viking settlement site in North America, which is also a UNESCO World Heritage Site. Visitors can see:

- details about the archeological discovery of the settlement
- exhibits that link Viking artifacts found there with everyday Viking life.

VIKING SHIP MUSEUM, ROSKILDE, DENMARK

Located right in the harbor, this museum was built in 1969 specifically to display the ships discovered in the Roskilde Fjord. Of particular interest are:

- the displays that focus on the Vikings in Ireland, and the meeting of the two cultures
- the museum shop, which sells copies of Viking jewelry and domestic objects.

TRELLEBORG VIKING FORTRESS, WEST ZEALAND, DENMARK

An ancient ring fortress constructed about 980, Trelleborg is situated in beautiful countryside and includes among its attractions:

- a museum in which items excavated at the site are displayed, and exhibitions are mounted to provide information about the fortress and how it was used
- activities and shows—many of them interactive—that offer an intimate look at who the Vikings were and how they lived.

LOFOTR VIKING MUSEUM, BORG, NORTHERN NORWAY

An accurate reconstruction of a Viking chieftain's homestead, this living museum is the result of years of archeological excavation and research. On display are:

- the objects and artifacts displayed in the house (many unearthed on the site) that connect the Vikings with southern Europe
- reconstructed Viking ships.

BRITISH MUSEUM, LONDON, UK

In both the Europe 300–1100 and Money galleries there are outstanding Viking collections. These include:

- the Cuerdale hoard of over 8,500 objects, such as coins and hack silver
- the Goldsborough hoard, including a large thistle brooch
- a whalebone plaque adorned with horsehead images and used for smoothing linen.

JORVIK VIKING CENTRE, YORK, UK

Sitting on the site of the ongoing Coppergate Viking excavations, this museum attempts to re-create the sights, sounds, and smells of the Viking era. Among its key features are:

- interactive rides where visitors are taken through re-created homes and businesses from the 10th century
- an artifacts gallery that shows visitors what the objects looked like in Viking times, and how they looked when they were first found by archeologists.

Pendant showing the goddess Freya, in the Museum of National Antiquities, Stockholm, Sweden



Glossary

ADZE Arch-bladed cutting tool.

ALTHING Governing assembly of all Iceland (*see also* THING).

ANVIL Solid block, usually made of iron, on which metal is worked by a smith (*see also* SMITH).

ARD Basic plow that breaks up the ground with a pointed blade.

AUGER Handled tool for boring holes in wood.

BALDRIC Leather sword strap, usually worn diagonally across the body.

BARBARIAN Coarse, wild, or uncultured person.

BOSS Projecting knob or stud.

BOW Prow, or front section, of a ship or a boat (opposite of STERN).

BYRE Rudimentary shed for cattle.

CASKET Small box or chest, often ornamental, intended for valuables or religious relics.

CAULDRON Large pot made from iron or stone. Vikings cooked in cauldrons set over a fire or suspended from a roof beam.



CAULKING Material (often tarred wool or loose rope fibers) stuffed between the strakes of a ship to act as waterproofing (*see also* STRAKE).

CHAIN MAIL Protective armor made from small, interlaced iron rings.

CLINKER Boat-building technique in which each external strake overlaps the one below (*see also* STRAKE).



CRAMPONS Iron studs nailed to the hooves of Viking horses to prevent them from slipping on icy ground.

CRUCIBLE Pot in which metal is melted.

DAUB Clay or dung plastered over wattle as waterproofing to form a wattle-and-daub wall, fence, or roof (*see also* WATTLE).

DEMOCRACY System of government in which the people being governed have a voice, usually through elected representatives.

DIE Engraved stamp used for making (also called striking) coins, medals, or brooches.

FIGUREHEAD Ornamental carving (sometimes detachable) on the prow of a ship (*see also* PROW).

FINIAL Decorative projection extending from the apex of a roof or a gable.

FJORD Long narrow arm of ocean or sea stretching inland, often between high cliffs.

FULLER Central groove cut into a sword's blade to make it lighter and more flexible.

FUTHARK Basic Scandinavian runic alphabet, named after its first six letters—the "th" sound counts as one letter (*see also* RUNE).

GANGPLANK Movable plank used for walking on or off a boat.

GUARD Cross-piece between a sword's hilt and blade that protects the user's hand (*see also* HILT).

GUNWALE (GUNNEL) Upper edge of ship's side; the top strake (*see also* STRAKE).

HACK SILVER Chopped up pieces of jewelry and coins used as currency.

HILT Handle of a sword or dagger.

HNEFTAFL Viking game played with counters on a wooden board.



HOARD Stash of buried Viking treasure that may include jewelry, coins, and other items made from precious metal.

HULL Body or frame of a ship.

JARL Earl, noble, or chieftain; one of the three classes in Viking society (*see also* KARL, THRALL).

KARL Freeman (as opposed to slave); largest of the three classes in Viking society. Farmers, traders, craftsmen, warriors, and major landowners were all karls (*see also* JARL, THRALL).



KEEL Lengthwise timber along the base of a ship on which the framework is constructed.

KEELSON Line of timber fastening a ship's floor timbers to its keel.

LONGSHIP Ship powered by lines of rowers and a single, rectangular sail.

MAST Timber or iron pole that supports a ship's sails.

MOOR To attach a ship to a fixed structure or object.

NIELLO Black metallic compound of sulfur with silver, lead, or copper. Niello is used for filling engraved lines in silver and other metals.

OARPORT One of the holes in the side of a longship through which the oars project.

ORTOGAR Viking unit of weight made up of three smaller units called *ore*, and equal to about ¼ oz (8 g).

PIN BEATER Slender wooden rod used in weaving to straighten threads and smooth the cloth.

PROW Bow, or front section, of a ship or boat (opposite of STERN).

PURLIN Horizontal beam supporting the main rafters in a typical Viking house.

QUERN Small, round stone mill for grinding grain into flour.

RAMPART Defensive mound of earth and turf supported by a wooden framework.

RIGGING Arrangement of a ship's mast, sails, and ropes.

RUNES Early Scandinavian letters, many of which were formed by modifying Greek or Roman characters to make them suitable for use in carving.

RUNE STONE Memorial stone carved with writing, pictures, and decorative motifs.

SCALD Viking term for a composer and reciter of epic poems about kings and heroes.

SCUTTLE The action of sinking a boat or a ship deliberately.

SHINGLES Thin, overlapping wooden tiles used for roofing on traditional Viking houses.

SHROUD Set of ropes supporting the mast on a ship.

SICKLE Handled implement with a curved blade used for harvesting grain or trimming growth.

SLED A vehicle on runners. Like Egyptian pyramid builders, Vikings used sleds to carry heavy loads. The sleds were richly decorated, perhaps ceremonial. Examples of sleds have been found in burial hoards.

SMITH Metalworker, as in a goldsmith or tinsmith. A blacksmith is someone who works with iron.



The 10th-century Jelling Stone, with its memorial runes

SPELT Early variety of wheat that produces particularly fine flour.

SPINDLE Small rod with tapered ends used for twisting and winding the thread in spinning.

SPINDLE WHORL Round piece of clay or bone attached to a spindle. The weight of the whorl helps the spindle to spin.

STAVE Upright wooden plank, post, or log used in building construction.

STAVE CHURCH Wooden church made of wooden planks (staves) set upright in the ground. Stave churches were built across Scandinavia after the arrival of Christianity.

STEM-POST An upright post at the prow, or front, of a ship.

STERN Rear section of a ship or a boat (opposite of BOW or PROW).

STERN-POST An upright post at the stern, or rear, of a ship.

STRAKE Horizontal timber plank used in the construction of ships.

TANG Metal spike on a blade or a bit, designed to slot into a wooden handle.

THING Local assembly. Every district was subject to the rule of its Thing, and all free men could express opinions there (see also ALTHING).

THRALL Viking slave (a man, woman, or child who is owned by another person in the same way as an item of property, usually to do work of some kind); one of the three classes in Viking society (see also JARL, KARL).



Valkyrie pendant

TILLER Horizontal bar attached to the top of a steering oar or rudder.

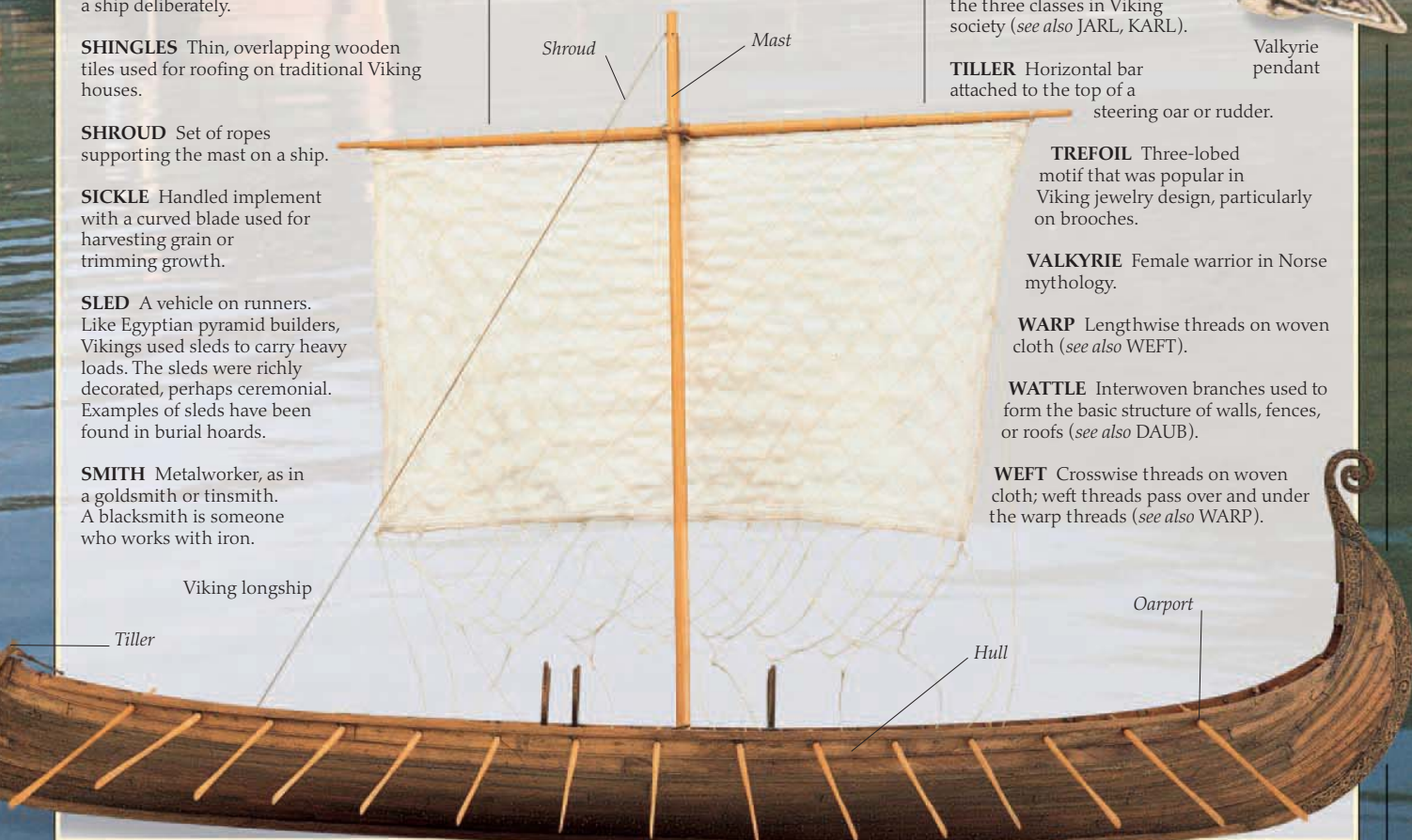
TREFOIL Three-lobed motif that was popular in Viking jewelry design, particularly on brooches.

VALKYRIE Female warrior in Norse mythology.

WARP Lengthwise threads on woven cloth (see also WEFT).

WATTLE Interwoven branches used to form the basic structure of walls, fences, or roofs (see also DAUB).

WEFT Crosswise threads on woven cloth; weft threads pass over and under the warp threads (see also WARP).



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