Hands On Learning
with Reading Museum Service

KNIGHT IN ARMOUR H24



Medieval society was traditionally divided into three groups - knights, clerics (priests and monks) and peasants. These three groups are illustrated in the image on the left. At the top end of the social scale were knights - men who had enough land to allow them to buy and maintain a horse and armour. Such items were very expensive. In return for the grant of land knights were expected to provide military service to their lord. The vast majority of society was made up of peasants.



Armour has been in use for thousands of years. In the Bible King David begins his career in the royal court as an armour bearer. He soon had to fight the giant Goliath:

A champion named Goliath, who was from Gath, came out of the Philistine camp. He was over nine feet tall. He had a bronze helmet on his head and wore a coat of scale armour of bronze weighing five thousand shekels; on his legs he wore bronze greaves, and a bronze javelin was slung on his back. His spear shaft was like a weaver's rod, and its iron point weighed six hundred shekels. His shield bearer went ahead of him.

These events may have taken place about 1000 BC. Clearly at this date heavy armour was a well developed technology. No one knows when the idea of protecting the body with toughened clothing during a fight began, but it is ancient.



The armour shown on this model is typical of the late thirteenth century. We can tell what kind of armour people wore at different times from evidence such as the manuscript illustration shown above, or from funeral monuments, such as the striking thirteenth century carved knight in Dorchester Abbey, Oxfordshire (above). In some cases actual pieces of armour have survived.

Reading Borough Council
Heritage Lottery Fund

READING MUSEUM SERVICE

Hands On Learning
with Reading Museum Service

KNIGHT IN ARMOUR H24

In western Europe, after the disintegration of the Roman Empire, fighters stopped using armour made from plates of metal. Instead the armour of choice was chain mail - interlocking iron or steel rings, which may be riveted or welded shut and which can be used to make a flexible if heavy armoured coat.



This was the kind of armour that was worn by warriors, both Norman and English, at the Battle of Hastings in 1066. It can be clearly seen in the vivid images of the Bayeux Tapestry. Two such scenes, from Reading Museum's copy of this amazing artefact from the early Middle Ages, can be seen above right and left. As well as their chain mail coats, the knights are shown protected by a conical helmet and a long shield.



By the twelfth century many pieces of plate armour had been added to the chain mail coat. The drawings on the right, like the model, show the style of armour in use around 1300. The main item of armour is still a chain mail coat (known as a hauberk), reaching to the knees, but in addition to this, chausses (chain mail leggings) and greaves (plate mail over the lower leg) have been added for extra protection. The foot is protected by a metal shoe called a sabaton.



Similarly, the arms now are not only protected by chain mail, but also by specially fitted pieces of plate armour. A rerebrace protected the upper arms (above the elbow), while a vambrace did the same for the forearm. The shoulders and elbows are protected by circular plates called besagews. The neck is protected by a flexible curtain of chain mail called an aventail.

Much of the terminology used to name bits of armour is medieval French, as this was the language of the English upper classes until the fifteenth century. The terminology also varied over time and from place to place.

Hands On Learning
with Reading Museum Service

KNIGHT IN ARMOUR H24

A knight would be considered undressed if he showed himself in public without his sword. In the Anglo-Saxon period swords tended to have broad and flat blades, with an average length of about 80 cm. By the thirteenth century blades had got longer. The grips, too, were longer than in the earlier days, to allow occasional two-handed use.



A knight had to practice his swordsmanship if he wanted to survive and even in the thirteenth century there were instruction books in the 'art' of fighting. The picture on the right is from a manuscript of this kind from about 1290. The two fighters are armed with a sword and a buckler - a small shield which gave poor protection against arrows, but could deflect the blow of an opponent's sword. According to medieval texts, in the absence of a shield the empty hand could be used for grabbing or grappling opponents.



The model knight is carrying a larger shield than a buckler. This shield was a useful tool, but it also allowed the knight to display his status as a knight. Each individual knight could be recognised by the arms they bore on their shields and the crests they wore on their helmets. Heralds at tournaments had to be familiar with all the different designs and became responsible for recording arms and controlling their use. Using a design to which you were not entitled was an offence and could lead to violence if, as sometimes happened, they were worn as part of a dispute over property inheritance. The illustration on the left is the Fenwick roll, which was compiled in the reigns of Henry V and VI to record each knight's crest and arms.

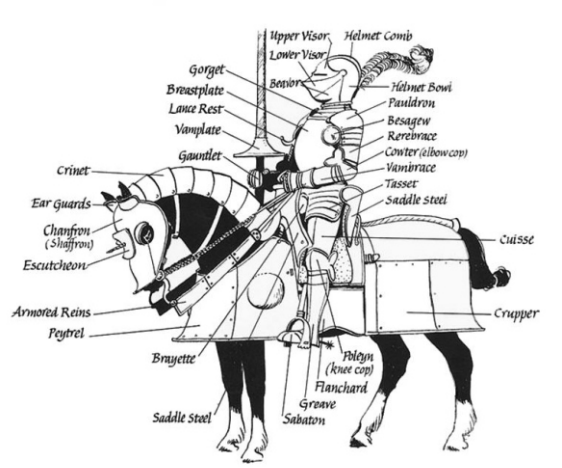
The one thing missing from the model knight is his spurs. In the course of the Middle Ages spurs gilded with gold came to be the badge of knighthood and 'to win his spurs' meant to gain knighthood. In 1302, after a militia of ordinary citizens from Bruges defeated an army of French knights, the victors hung up bushels of knights' spurs in the nearby churches. This became known as the Battle of the Golden Spurs (right).



READING MUSEUM SERVICE

Hands On Learning
with Reading Museum Service

KNIGHT IN ARMOUR H24



By the fourteenth century plate armour, in which most of the body is covered by plates of steel, became commonplace (left). Mail continued to be used to protect those joints which could not be adequately protected by plate, such as the armpit, crook of the elbow and groin. A full set of armour of this kind had to be made to fit the individual for whom it was intended, much as a suit is measured, cut and stitched by a tailor to fit its owner.

The aim was to create an armoured shell which was both sturdy and flexible. It is untrue that knights had to be winched onto their horses and were useless when knocked off. Such unwieldy armour would have been a liability. On the other hand, it is certainly true that wearing a full suit of plate armour was exhausting and vision was often restricted by narrow slits designed to protect the eyes.



The effectiveness of plate armour against arrows and crossbow bolts is much debated. Crossbow bolts could be fired with much more force than arrows from a longbow. They were, however, cumbersome to reload (although not more so than early muskets). Longbows could be fired more rapidly, although the impact of their arrows was less. Archers and crossbowmen can be seen in the picture (right) of the Battle of Crecy, 1346.

English archers famously halted armed French knights at the Battle of Agincourt. However, the arrows they fired need not have killed to be effective. At the time of Agincourt, a typical suit of armour had a mass of between 30 and 45 kg and was made of wrought iron, which is rather soft. The thickness of the armour varied according to the part of the body being protected. The thickest armour was up to 4 mm thick and the thinnest about 1 mm. Experiments (not using live-targets!) suggest that arrows could easily penetrate 1 mm of armour. They did not penetrate far enough to damage vital organs, but they would still cause agonising pain and disable their wearer.

Hands On Learning
with Reading Museum Service

KNIGHT IN ARMOUR H24



A blast of arrows, even if it couldn't be maintained for more than a few minutes, was clearly very effective. It is thought that Henry V's 5,000 archers fired about 400,000 arrows in eight minutes. Incapacitated knights could be finished off by poking knives through gaps in the armour or hitting them with pollaxes - long handled axes also fitted with hammers. The photograph on the left shows a smashed skull recovered from the site of the Battle of Towton (1461), probably caused by a pollaxe.

On the other hand, in hand-to-hand fighting a good set of armour greatly increased the chances of survival. The expense of such equipment meant that most troops were only lightly armoured. A fully armoured knight could take blows which would fell most of his lightly armed opponents.



Plate armour continued in use into the sixteenth century. The photograph on the right shows cavalry armour from this period. By this date, the days of such armour were numbered. Early firearms were not more effective than arrows, but gradually gun technology became more deadly and plate armour became confined to jousts and ceremonial occasions.





The stone effigies of Nicholas de la Beche (above left, died 1348) Philip de la Beche (right, died 1327) in Aldworth church, near Reading. There are many monuments to the de la Beche family in this church. Evidence like this helps us to learn about changing fashions in armour during the Middle Ages.