

Inside story
CASTLE



Illustrated by Peter Dennis

 Orpheus

Contents

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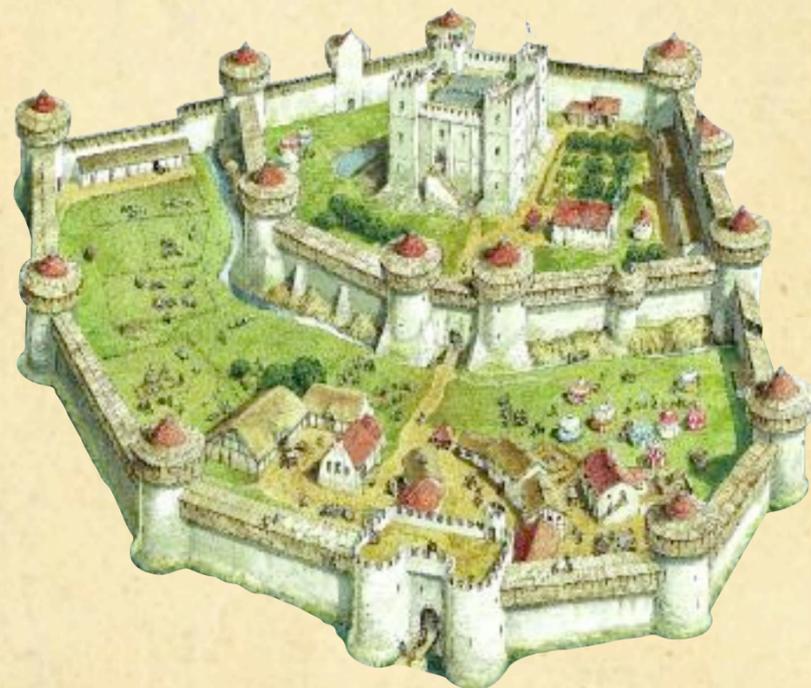
Illustrator Peter Dennis

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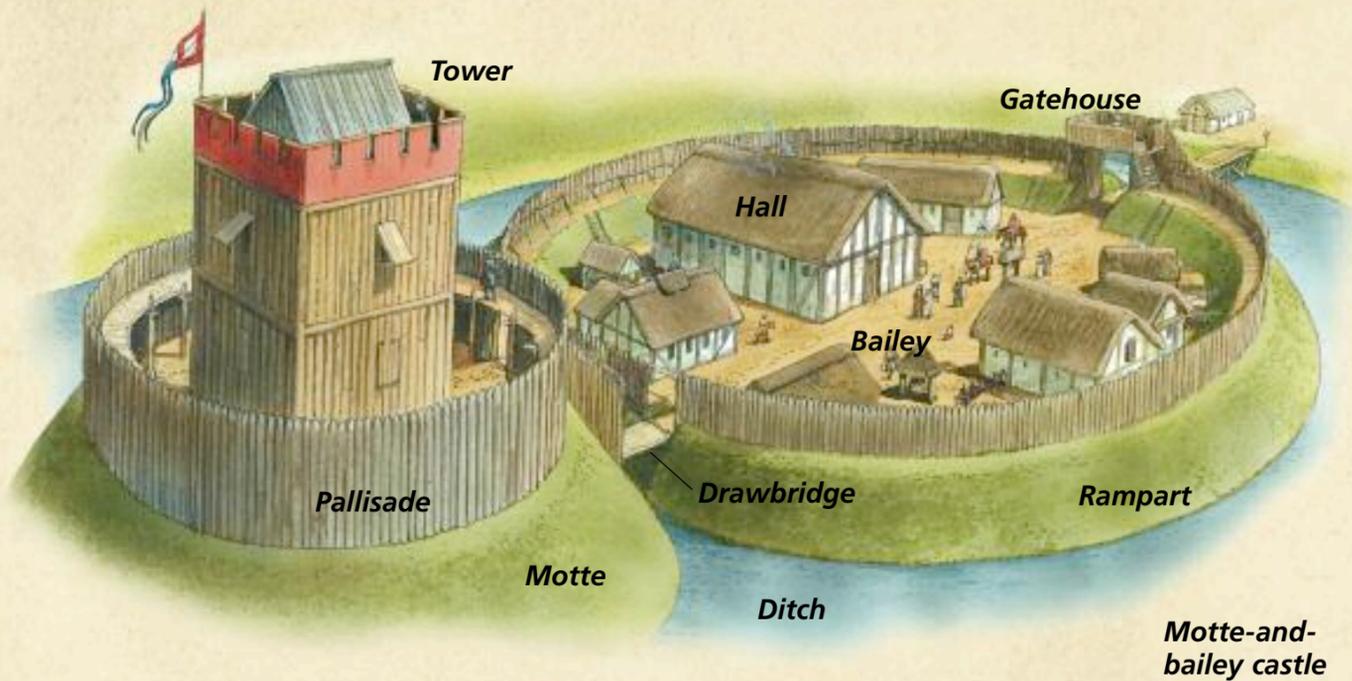


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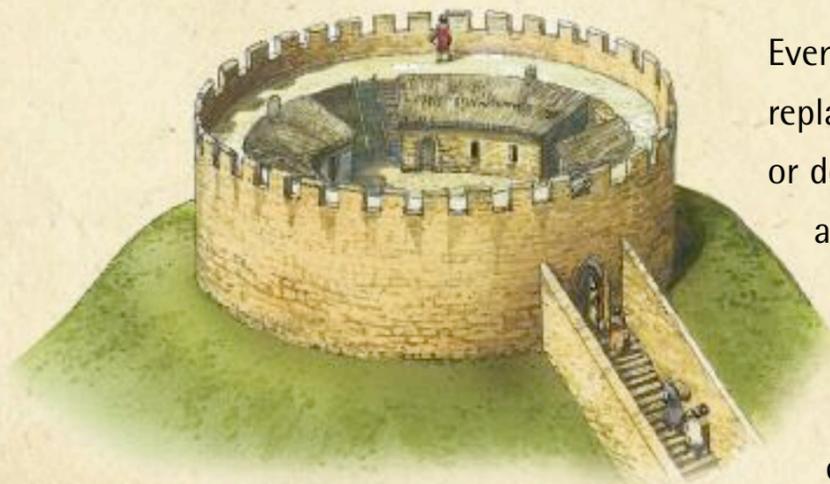




The story of castles

Castles are found in different parts of the world; today, many lie in ruins. Most castles were built hundreds of years ago by rich and powerful people, such as kings or wealthy landowners, to defend and control the land around them.

An early stone keep



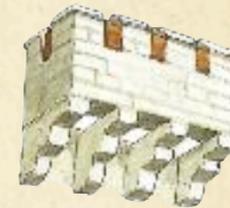
In Europe, the earliest castles were wooden forts built on the top of a hill. They were called motte-and-bailey castles. The motte was a mound of earth, topped by a wooden tower and high fence. The small enclosed courtyard next to the fort was called the bailey. Inside the bailey were a hall, chapel, barn, stable and other buildings. A drawbridge connected the bailey to the motte.

Eventually, the wooden forts were replaced by stone buildings, called keeps or donjons. These were much stronger and easier to defend. Instead of a tower, the outbuildings and living quarters were built against the inside of the wall, leaving a small courtyard at the centre.



Krak des Chevaliers, an Islamic fortress converted into a concentric castle by crusader knights.

In the late 1000s, the first rectangular stone keeps were built. They had several floors and corner towers, and incorporated all the major parts of the castle in one tall building. The stores and guards' quarters were situated on the lowest floor, the Great Hall above that, while the lord's private rooms and chapel were on the top floor.

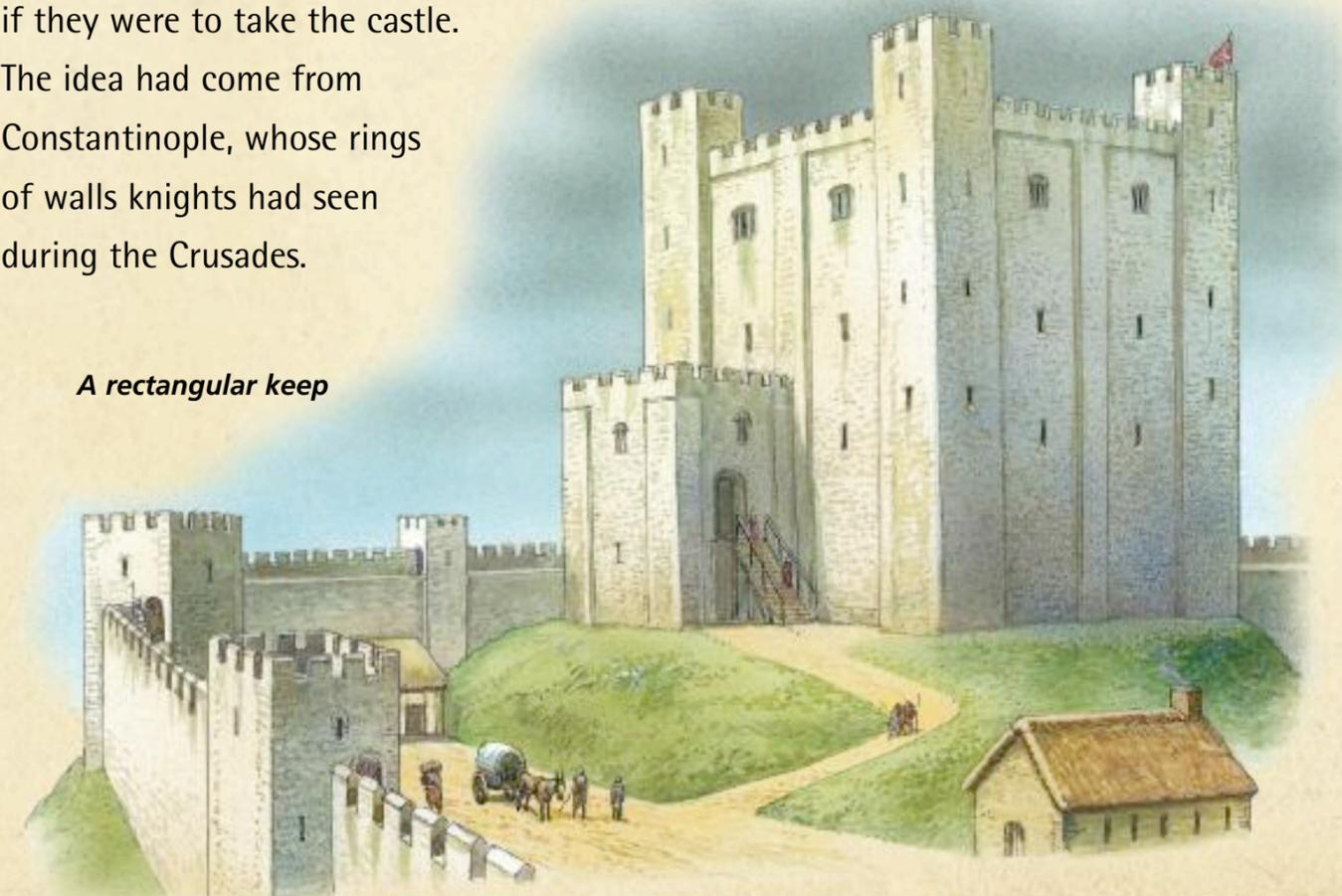


Machicolations, stone overhangs, were first in the 1270s.

By the late 1200s, most new castles had a concentric layout. The inner ring of walls was now encircled by an outer wall. Attackers now

had to break through several barriers if they were to take the castle. The idea had come from Constantinople, whose rings of walls knights had seen during the Crusades.

A rectangular keep



This book tells the INSIDE STORY of a castle. What was behind the thick stone walls? What was it like to live there? See a castle being built, watch it being besieged, and see the castle as it is today.

LUXURY HOME

This castle was not only a fortress to protect the lord, his family and people from attack, but also a symbol of the lord's great wealth and

importance. It was a home too, and had luxurious rooms for the lord's family to live in.

Block and tackle winching up building stones



Measuring

Holes to support roof beams

Fixing roof timbers

Laying roof tiles

Rubble infill

Master mason

Chapel

Digging the well

Limewashing

Using scaffolding to reach up the walls

Quarrying building stone on-site

LIFTING MACHINES

Stones and mortar were lifted to the upper levels using hoists—wooden frames with ropes fed through pulleys. The heaviest stones were raised by tread-wheels, driven by a man walking inside a giant wheel.

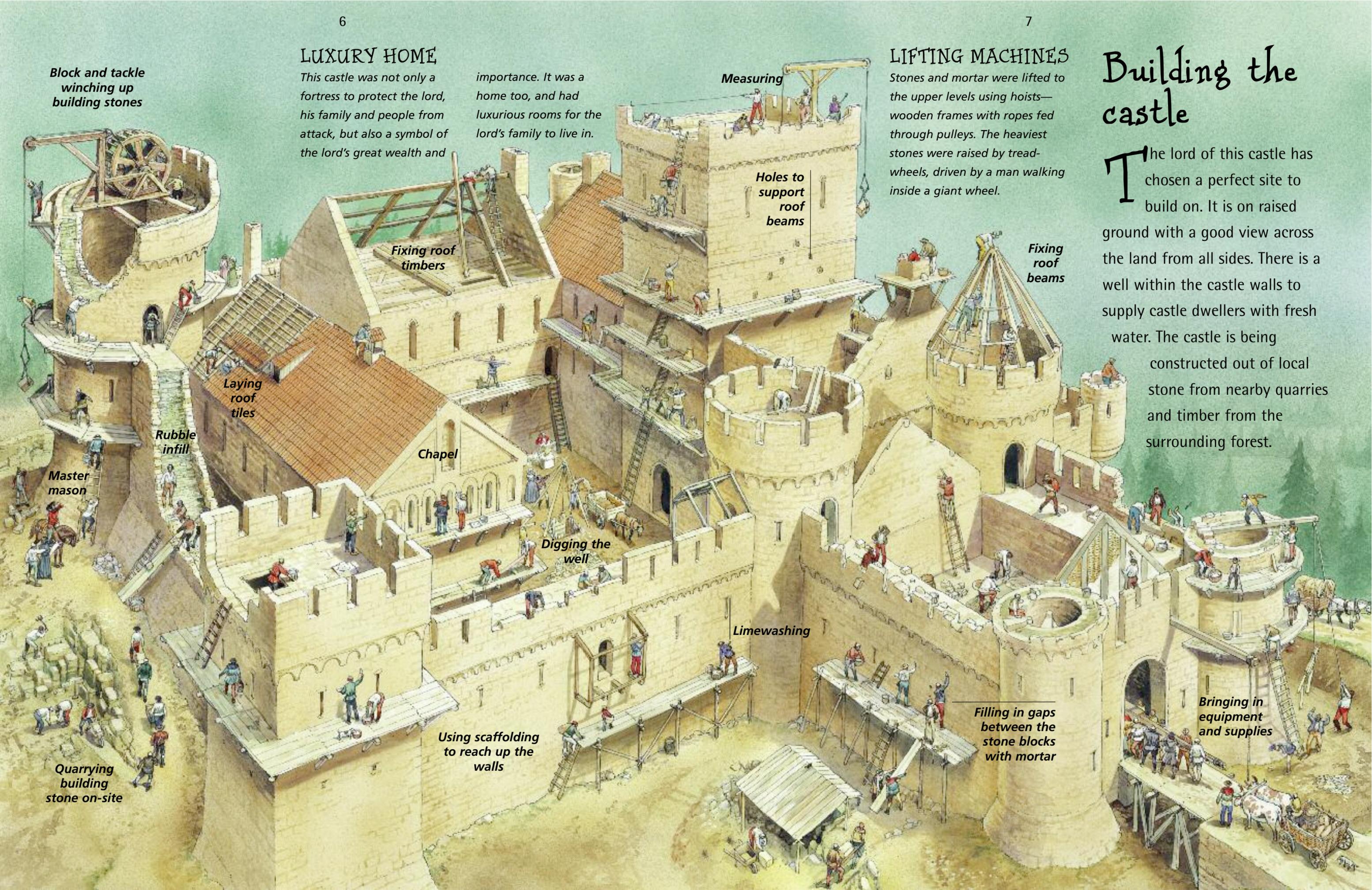
Building the castle

The lord of this castle has chosen a perfect site to build on. It is on raised ground with a good view across the land from all sides. There is a well within the castle walls to supply castle dwellers with fresh water. The castle is being constructed out of local stone from nearby quarries and timber from the surrounding forest.

Fixing roof beams

Filling in gaps between the stone blocks with mortar

Bringing in equipment and supplies



ROOF MATERIALS

Thatch was the cheapest roofing material, but it could easily catch fire. Thin squares of wood called shingles were easy to make, but they would rot and burn easily. A castle of this quality would use pottery tiles, which were fireproof and longlasting.

MASONS

The stones used to build the castle were fashioned by masons. A master mason was in charge of the design of the castle and all the building work. He oversaw the work of freemasons, who cut and carved the stones, and roughmasons, who built the walls.

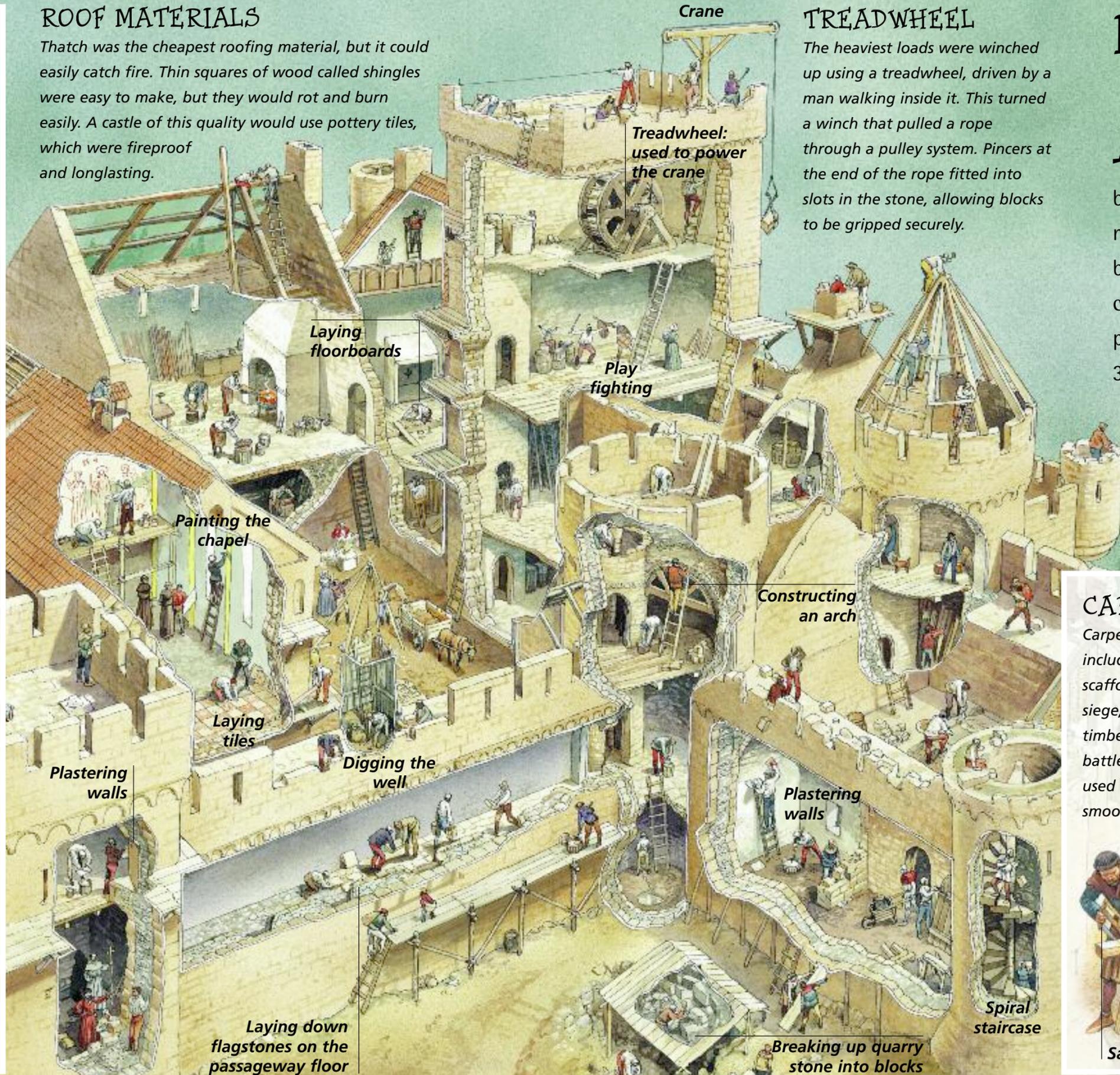
First, rough blocks of stone from the quarry were cut down to size. A mason used a range of tools to shape and lay stones. He had several chisels (1) for splitting and carving stone and (2) for scraping away stone. He used a trowel (3) for laying mortar, while an axe (4) was needed for trimming large blocks of stone.



Standing on scaffolding, rough masons would lay down stones (left). Walls were made by packing rubble mixed with mortar between two outer layers of stone blocks.

TREADWHEEL

The heaviest loads were winched up using a treadwheel, driven by a man walking inside it. This turned a winch that pulled a rope through a pulley system. Pincers at the end of the rope fitted into slots in the stone, allowing blocks to be gripped securely.



Crane

Treadwheel: used to power the crane

Laying floorboards

Play fighting

Painting the chapel

Constructing an arch

Laying tiles

Digging the well

Plastering walls

Plastering walls

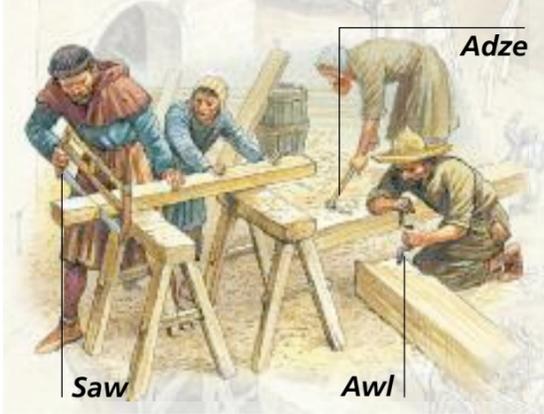
Laying down flagstones on the passageway floor

Breaking up quarry stone into blocks

Spiral staircase

CARPENTERS

Carpenters assembled wooden items including joists, floorboards, gates and scaffolding. If the castle came under siege, they would need to make the timber hoardings to cover the battlements and turrets. An awl was used for making holes and an adze for smoothing rough-cut wood.



Saw

Awl

Adze

Manpower

An army of workers is needed to build a castle. With only a few basic kinds of tool available, most of the work is achieved by a combination of skilled craftsmanship and muscle power. Between 2000 and 3000 men, including masons, blacksmiths, carpenters and labourers, may be required if the job is to be completed within 20 years.

CHAPEL

The lord and his family would worship in the chapel several times a day. The chapel's beautiful stained glass windows were a sign of the lord's great wealth.

Wooden shutters cover crenelles—spaces from where archers can shoot arrows.

Merlons: high sections between crenelles

Machicolations: overhanging stone structures through which guards can shoot attackers below

Roofs covered in pottery tiles

CRENELLATIONS

This castle had strong walls topped by crenellations—jagged battlements with gaps, called crenelles, for archers to fire through. The lord had to get a special licence from the king to add these battlements to his castle. It is these that made castles different from any other building. If the lord had built the castle without the licence, the king could have seized it from him.

Chimney

Great Hall

Stained glass windows

Well

Chapel

Garderobe or latrine

THICK WALLS

The walls between towers were called curtain walls. To strengthen them, they were built up to two metres thick. The outer and inner surfaces were made of stone blocks

Lord's standard

Crenellations

GREAT HALL

At the centre of the castle was the Great Hall. The lord carried out much of his business here. Meals were served in it too, and a fire was kept burning all year round. Many of the castle servants slept in the Great Hall at night.

Wall walk

Limewashed walls

Arrow slit

and the gap between them infilled with rocks and mortar—a mixture of sand, lime and water. The walls were then limewashed (painted white) to protect against the rain and to give a smart finish.

ARROW SLITS

Narrow holes in the castle walls allowed archers to shoot out, but it was almost impossible for the enemy to shoot back through them.

Gatehouse

Battlements

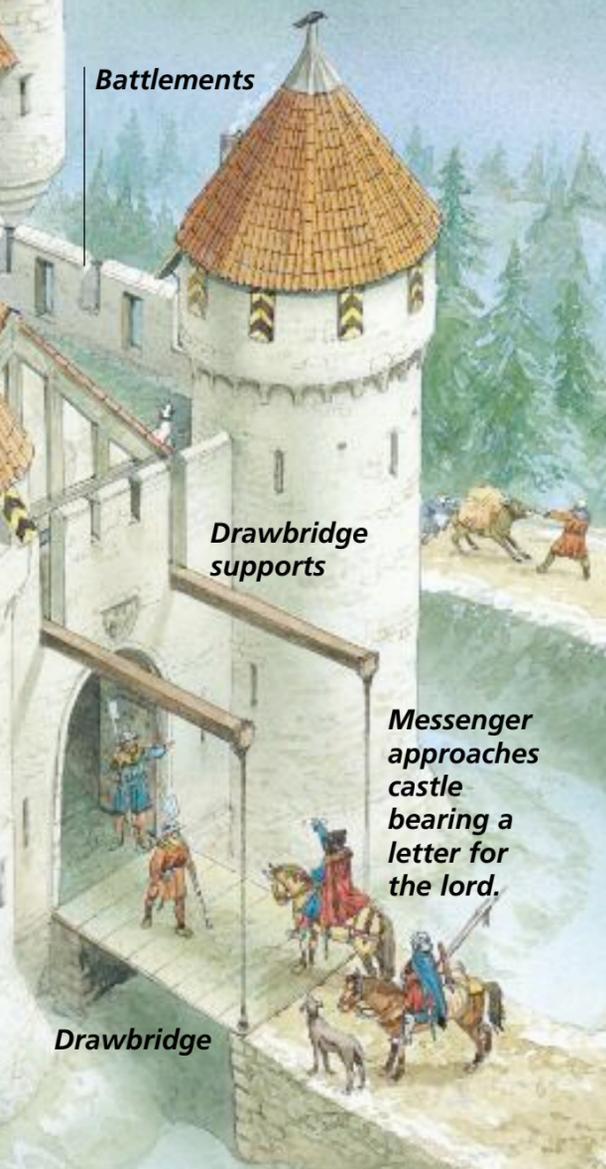
Drawbridge supports

Drawbridge

Messenger approaches castle bearing a letter for the lord.

Finished castle

The castle has been sturdily built. It has luxurious rooms for the lord and his family, but is also well equipped to fight off attack. It has dungeons, an armoury and a treasure house, as well as quarters for soldiers. Wars break out frequently, so it is important that the castle is always prepared for battle.



ALCHEMIST

Alchemists believed it was possible to turn ordinary metals into gold. They also tried to find an "elixir of life" that would cure all human ills.

Alchemist

Bedchamber

Minstrels

Servants' bedchamber

Dining in the Great Hall

Kitchens

Praying in the chapel

Steward's office

Guardsmen passing the time by playing dice

The garderobe (latrine) empties into the moat or ditch below

The core of the wall is filled with rubble and mortar

Gunpowder store

KITCHENS

One of the busiest and largest areas of the castle was the kitchens. The cooks, bakers, scullions and other kitchen servants worked day and night to keep everyone in the castle fed.

Armourer making chain mail

Play fighting

Crossbowmen on watch duty

Raised portcullis

Constable's office

Stone spiral staircase inside tower

Oubliette: A small cell beneath the dungeon floor

Castle life

The castle was completed a few years ago now, and life inside has settled into a routine.

Many people are needed to keep the castle running smoothly—there is always plenty going on within its walls.

The castle has never been attacked, but the lord insists his guards keep a careful look out, just in case.

CASTLE WORKERS

A large number of staff, servants and craftsmen catered for the Lord's needs. The pantler was in charge of the food store, while trenchermen served meals. Grooms looked after horses while blacksmiths (above) made horseshoes as well as other metal objects. Armourers mended weapons and armour. Scullions helped the cook with jobs around the kitchen and castle gardens (below).



NOBLE FAMILY

The castle was the family home of a nobleman or baron and his wife, the lord and lady of the castle. The lady took charge of the castle while the lord was away. Among their servants, who were all under the control of the chamberlain, were ladies-in-waiting, the lady's personal assistants, and pages, who served at meal times and ran errands.

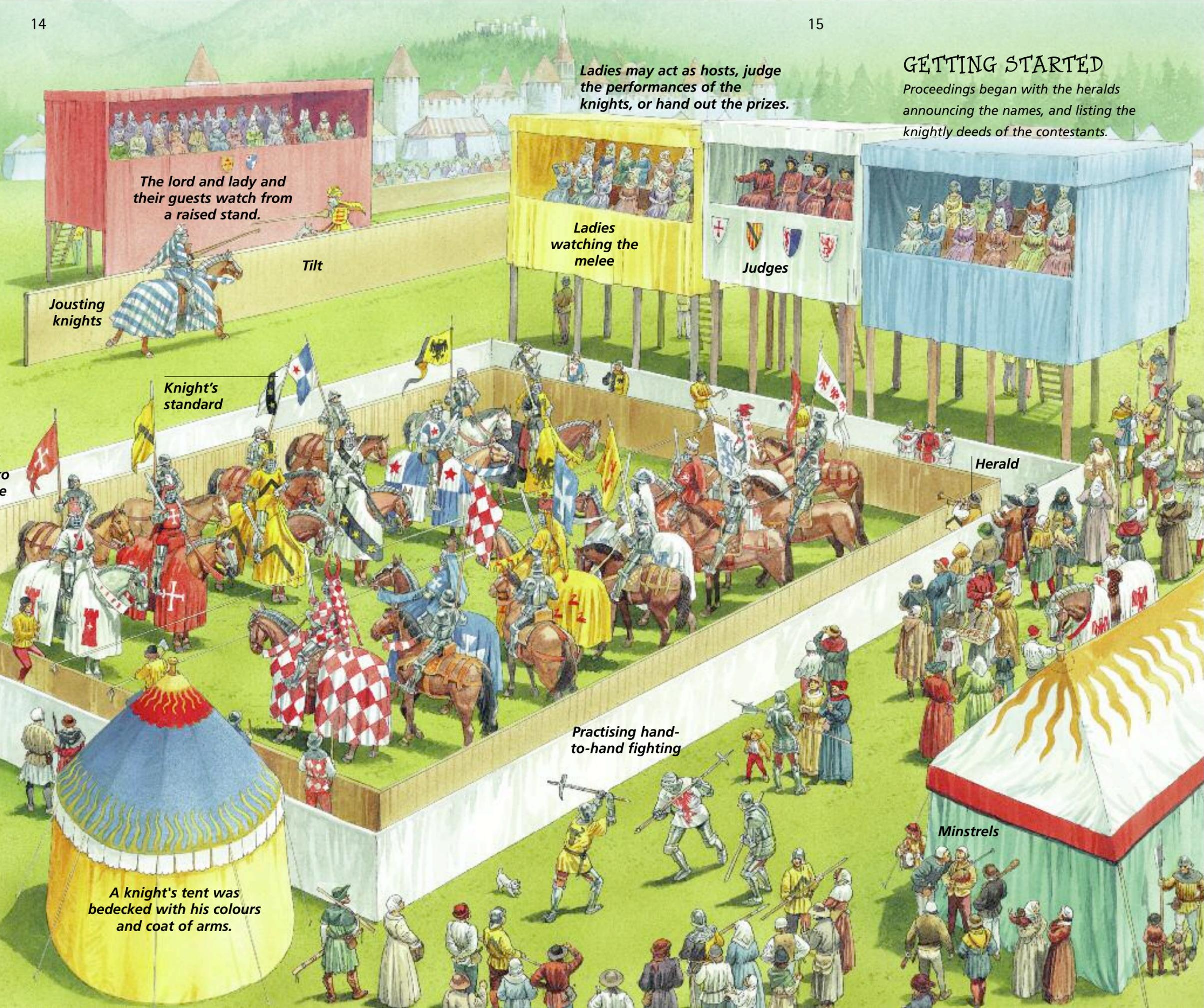


Tournament

To keep his knights occupied during peacetime and to test their fighting skills, the lord has decided to hold a tournament. Here knights will fight mock battles, called melees, and joust against each other on horseback. In the joust, knights try to unhorse their opponents by charging at them with a long wooden lance.

COATS OF ARMS

Before the joust, all the knights would parade in front of the audience, who cheered for their favourites. Because they were wearing armour, it was impossible to tell which knight was which. So the competitors and their horses wore distinctively patterned colours, and the knights carried shields decorated with their coats of arms. This way they could be easily recognized from a distance.



Jousting knights

The lord and lady and their guests watch from a raised stand.

Tilt

Knight's standard

Knights waiting to begin the melee

Squires ready to assist their knights

Herald

Practising hand-to-hand fighting

A knight's tent was bedecked with his colours and coat of arms.

Minstrels

Ladies may act as hosts, judge the performances of the knights, or hand out the prizes.

Ladies watching the melee

Judges

GETTING STARTED

Proceedings began with the heralds announcing the names, and listing the knightly deeds of the contestants.

Knights

Knights are "gentlemen soldiers". They form a separate class of people below the nobility but above merchants and craftworkers. Lords secure knights' services by rewarding them with land. Knights are expected to follow a code of chivalry, by which they have a duty to defend the weak and show courtesy, especially to women.

ARMOUR

The first knights wore chain-mail coats, made from thousands of metal rings joined together. In the 1300s, steel plates were added to protect the arms and knees.

1300s They were jointed so a knight could still move easily.

Plate armour offered much more protection than mail, and so by the 1400s complete suits of armour were worn. A shield was no longer needed to fend off the blows of a sword or mace, although a crossbow bolt could still penetrate the armour.

1400s



JOUSTING

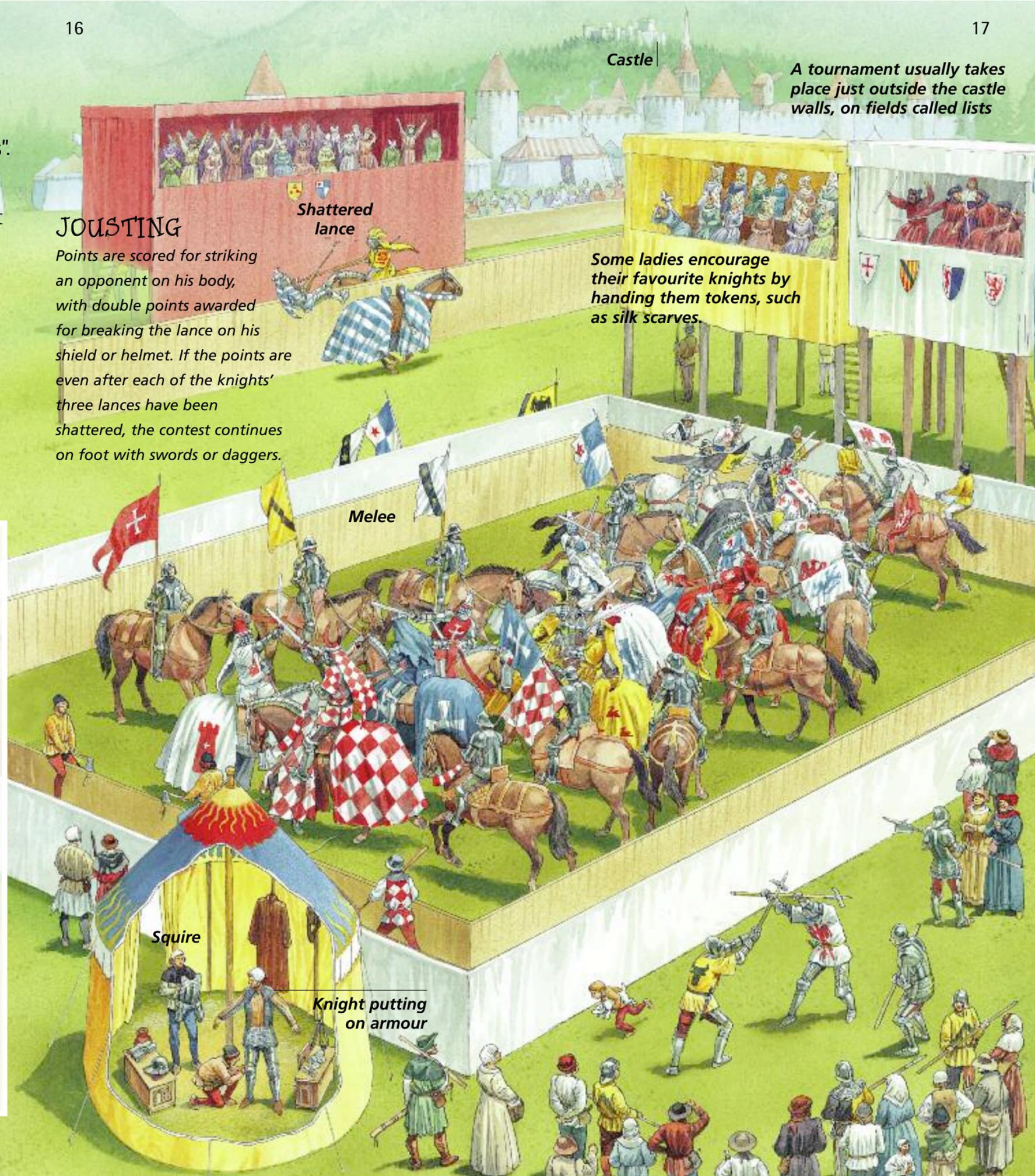
Points are scored for striking an opponent on his body, with double points awarded for breaking the lance on his shield or helmet. If the points are even after each of the knights' three lances have been shattered, the contest continues on foot with swords or daggers.

Shattered lance

Melee

Squire

Knights putting on armour



A tournament usually takes place just outside the castle walls, on fields called lists

Some ladies encourage their favourite knights by handing them tokens, such as silk scarves.

Playing quintain

Sand bag

Target

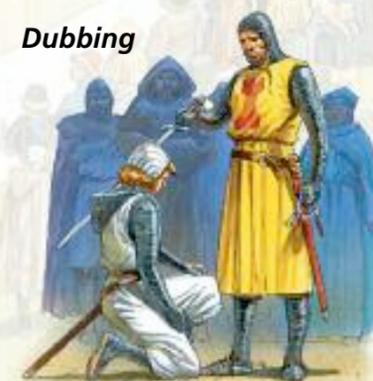


BECOMING A KNIGHT

Only the son of a knight could grow up to be a knight. He had to go through years of training, to learn the fighting skills and behaviour expected of him.

Young boys were sent as pages to live in a knight's household. At the age of 15, a page became a squire, acting as the personal servant to a knight. He learned how to ride a horse, fight with a sword, mace, lance and axe, and how to out-think an opponent in battle.

Dubbing



A useful training for the joust was to take part in the game of quintain (top), aiming at a shield on a spinning arm. If the shield were struck only slightly off-centre, a bag of sand would spin round and knock the squire off his horse.

When training was complete, the squire was ready to become a knight. This took place at a dubbing ceremony.

FINE BUILDINGS

The grandest building in the town was the stone-built church at its centre. This was built to show the world how prosperous the town and the lord were. When he built his castle, the lord made many changes to the church as well. He made it bigger and added a tall spire and many impressive stone carvings. Some of the finer buildings in the town, such as the rich merchant's house, were built of expensive stone. The poorer houses were made from cheaper timber with walls of sticks and plaster, called wattle and daub.

CROWDED HOUSES

The town's buildings contained shops and workshops on the ground floor with living areas above. Rich men, such as wine merchants, might own a whole house and let part of it to out for others to live in. Poorer people would occupy just one small room near the top of the building.

WINDMILL

The windmill was owned by the lord. All the farmers on his land had to bring their grain to be ground into flour here. The lord charged them a fee for this, called multure. When the mill was not working, the miller positioned the sails in a diagonal cross to signal to the farmers not to come.

In the town

Below the castle lies a thriving market town. The lord of the castle owns some of the town's buildings, including the windmill. While most of the townspeople are poor, some very wealthy citizens live here too. A rich wine merchant, for instance, has built a large house in the centre of the town.



Timber-framed houses

Church

Belfry

Windmill

Wattle and daub walls

Merchant's house

Merchant's wife

Knight with his squire

Leper

Taking sheep to market

BLACK DEATH

Diseases were common in medieval towns. People lived crowded together and there was no running water. Bubonic plague was particularly feared. It was known as the Black Death because of the black spots that appeared on victims. It was carried by fleas that lived on black rats—although no one knew that at the time. There was no cure and many people died. The dead bodies were collected on carts in the night.



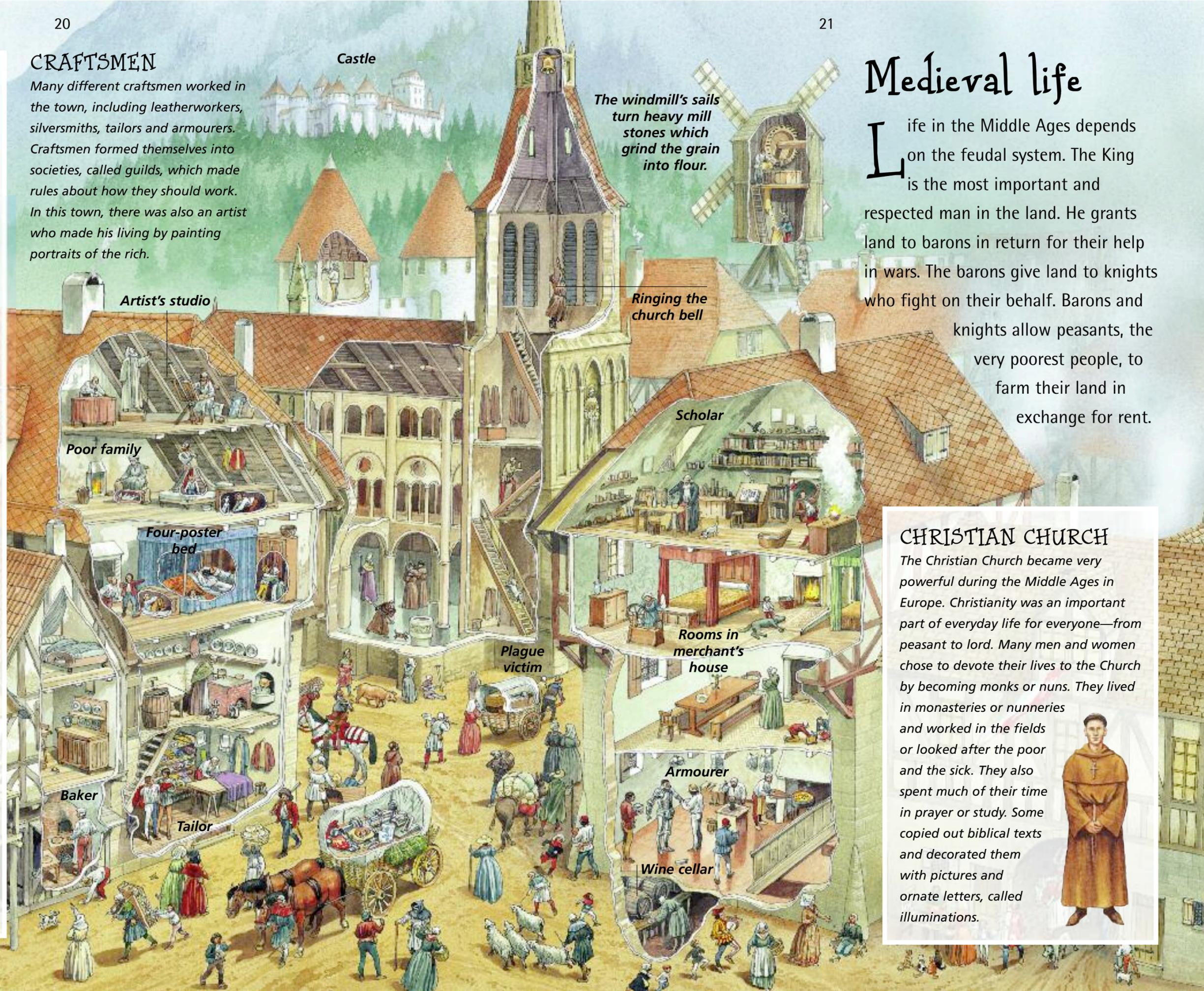
MARKET DAY

Market day was the busiest day of the week. Local farmers came to sell meat and vegetables. Travelling merchants came from afar to sell their fine cloth and other wares. Pedlars sold all kinds of goods. Tinkers would repair pots and pans, while the visiting crowds were entertained by jugglers, jesters and even dancing bears.



CRAFTSMEN

Many different craftsmen worked in the town, including leatherworkers, silversmiths, tailors and armourers. Craftsmen formed themselves into societies, called guilds, which made rules about how they should work. In this town, there was also an artist who made his living by painting portraits of the rich.



Medieval life

Life in the Middle Ages depends on the feudal system. The King is the most important and respected man in the land. He grants land to barons in return for their help in wars. The barons give land to knights who fight on their behalf. Barons and knights allow peasants, the very poorest people, to farm their land in exchange for rent.

CHRISTIAN CHURCH

The Christian Church became very powerful during the Middle Ages in Europe. Christianity was an important part of everyday life for everyone—from peasant to lord. Many men and women chose to devote their lives to the Church by becoming monks or nuns. They lived in monasteries or nunneries and worked in the fields or looked after the poor and the sick. They also spent much of their time in prayer or study. Some copied out biblical texts and decorated them with pictures and ornate letters, called illuminations.



*Tiled roofs
smashed by
enemy missiles*

CANNONS

Before the invention of cannons, it was very difficult to smash through thick castle walls. But cannonballs could easily blast through tiled roofs and sometimes even thick stone walls. The invention of the cannon meant that castles were no longer so secure.

BATTERING RAM

Battering rams were made from a heavy tree trunk suspended within a frame. This could be swung with great force to smash down barriers. Once the gatehouse entrance was destroyed, the attackers could swarm inside the castle.

Battering ram protected inside a covered wooden frame

Gatehouse entrance destroyed by battering ram

Drawbridge pulled up to act as barrier

Throwing a fire bomb

Animal hides help reduce the spread of fire

A siege tower allows the enemy to gain access to the top of the castle walls.

Carrying water to douse the fire

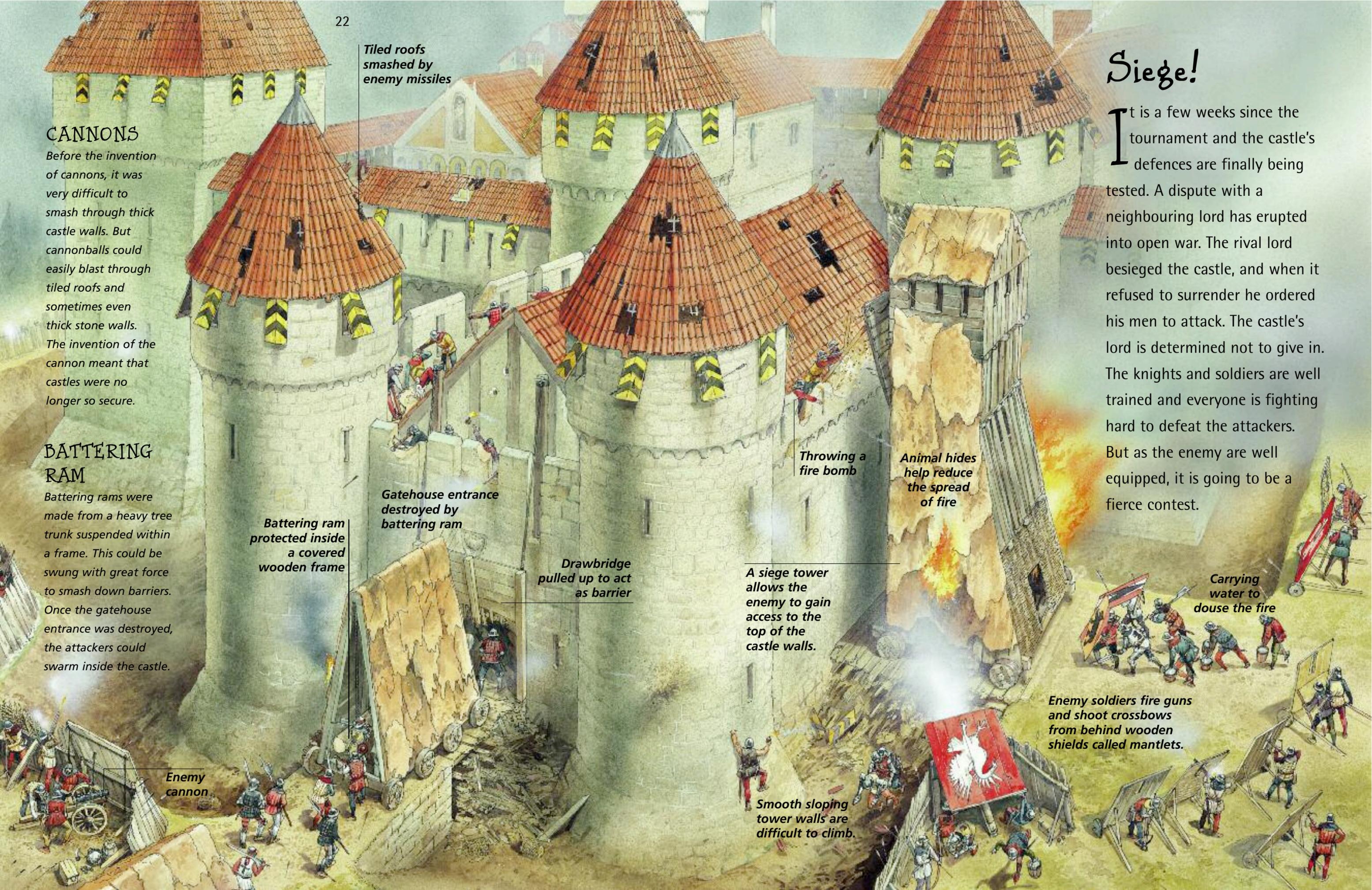
Enemy soldiers fire guns and shoot crossbows from behind wooden shields called mantlets.

Smooth sloping tower walls are difficult to climb.

Enemy cannon

Siege!

It is a few weeks since the tournament and the castle's defences are finally being tested. A dispute with a neighbouring lord has erupted into open war. The rival lord besieged the castle, and when it refused to surrender he ordered his men to attack. The castle's lord is determined not to give in. The knights and soldiers are well trained and everyone is fighting hard to defeat the attackers. But as the enemy are well equipped, it is going to be a fierce contest.



DEFENCES

The defenders' best hope was in their well-trained archers. These men took position along the top of the battlements and by slits in the castle walls. The archers had a good view through the slits, but it was virtually impossible for the enemy to shoot back through them.



Defenders near the castle entrance could shoot arrows, drop stones or pour hot oil or sand through "murder holes" on to the heads of attackers. Hot sand found its way through tiny chinks in the enemy's armour and scorched their skin.



Most castles had spiral staircases that spiralled up in a clockwise direction. This gave the advantage to the defenders (provided they were right handed) because it was easier for a swordsman to strike at an opponent standing lower on the stairs, who had to lean around the corner to use his sword.



Shooting crossbows and long bows through arrow slits in the castle wall

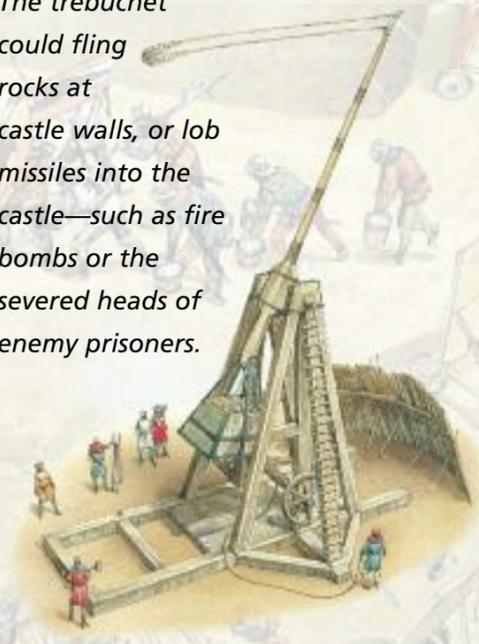
An enemy fire bomb flung by a giant catapult, called a trebuchet, finds its mark.

Defending the castle

The soldiers of the castle garrison are armed with powerful long bows and crossbows. They fire on the enemy from behind the castle walls. The besieging army must gain entry to the castle to stand a chance of overcoming them.

TREBUCHET

The trebuchet was a huge catapult capable of flinging objects with great force and accuracy. It had a long arm with a heavy counterweight at one end and a sling at the other. The sling was loaded, the counterweight wound up and the trigger released, to fling the missile. The trebuchet could fling rocks at castle walls, or lob missiles into the castle—such as fire bombs or the severed heads of enemy prisoners.



Crossbowmen

Brazier to heat up oil and sand

Pouring hot sand on to the enemy through a murder hole

Murder hole

Battering ram made out of a sturdy tree trunk

Enemy soldiers inside the siege tower

Winding a crossbow ready to fire

Infilled ditch



HISTORICAL HERITAGE

Looking after the ruins of buildings like this is an expensive business. It requires much skill and knowledge.

But many people believe the expense is worthwhile. It gives visitors the chance to explore historical buildings and discover what it was like to live in such places hundreds of years ago.

Remains of the alchemist's turret

Exploring the ruined battlements

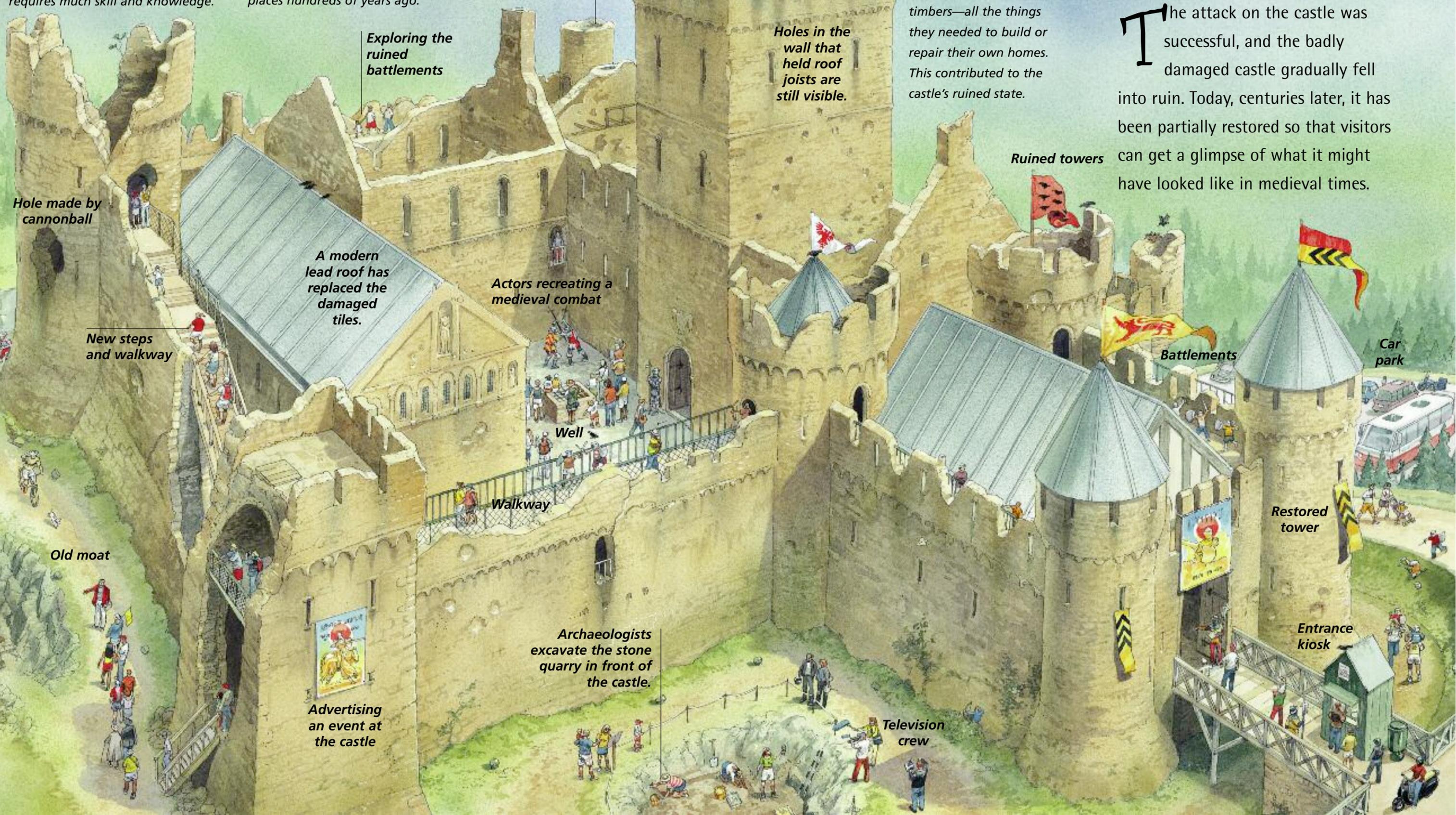
Holes in the wall that held roof joists are still visible.

PLUNDERERS

200 years ago, local people started to chip away at the walls and take away stone, tiles and timbers—all the things they needed to build or repair their own homes. This contributed to the castle's ruined state.

The castle ruins today

The attack on the castle was successful, and the badly damaged castle gradually fell into ruin. Today, centuries later, it has been partially restored so that visitors can get a glimpse of what it might have looked like in medieval times.



Hole made by cannonball

A modern lead roof has replaced the damaged tiles.

Actors recreating a medieval combat

Ruined towers

Battlements

Car park

New steps and walkway

Well

Walkway

Restored tower

Old moat

Advertising an event at the castle

Archaeologists excavate the stone quarry in front of the castle.

Television crew

Entrance kiosk

CLUES TO THE PAST

Archaeologists working at this castle site have found many objects, such as belt buckles and bits of armour, from medieval times. These can help us understand how people lived 500 years ago.

LOOKING AROUND CASTLES

If you look around an old castle, it is possible to find clues that tell you what the castle was like back in the Middle Ages. Here, for example, is an area of painted plaster. Now faded, it was once covered with bright patterns.



These rows of square holes high in the walls once held joists, long timbers that supported the wooden floors.



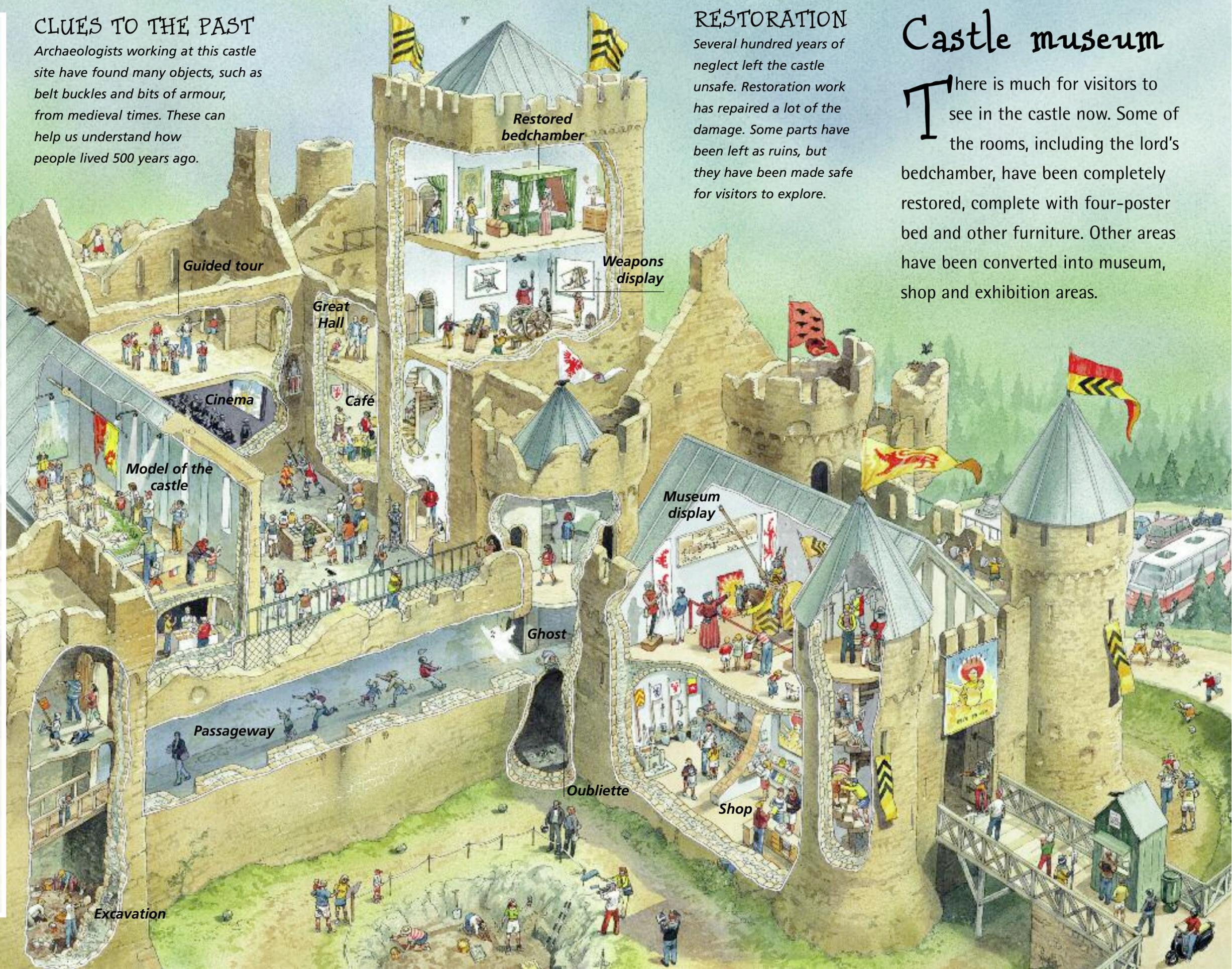
You may be able to see fireplaces all over the castle. Open fires were the only way to provide heat to castle rooms. Often, fireplaces can be found high up in the walls. They were once in rooms on higher floors whose floorboards have since disappeared.

RESTORATION

Several hundred years of neglect left the castle unsafe. Restoration work has repaired a lot of the damage. Some parts have been left as ruins, but they have been made safe for visitors to explore.

Castle museum

There is much for visitors to see in the castle now. Some of the rooms, including the lord's bedchamber, have been completely restored, complete with four-poster bed and other furniture. Other areas have been converted into museum, shop and exhibition areas.



Glossary

Arrow slit An opening in castle walls through which arrows were shot.

Battering ram A large tree trunk used to break down walls or doors.

Battlements The top of a wall with a series of gaps (crenelles) between raised portions (merlons). They are also called crenellations.

Coat of arms The emblem of a noble family, usually in the shape of a decorated shield.

Crenellations see battlements.

Crossbow A mechanical bow using short bolts rather than arrows.

Garderobe A toilet, often emptying into the moat.

Machicolation An overhang above a gateway or at the top of a tower with holes through which guards could shoot or drop hot sand on attackers below.

Mantlet A wooden shield on wheels.

Melee A mock battle played during tournaments.

Moat A dry or water-filled ditch surrounding a castle.

Multure A fee charged by the lord to farmers for using his mill to grind grain.

Murder hole An opening in the ceiling through which defenders fired or dropped missiles on to their enemies below.

Oubliette An under-floor dungeon reached by a trapdoor.

Siege tower A wooden tower on wheels, which attackers used to climb over castle walls.

Trebuchet A powerful siege weapon like a large catapult.

Tournament An event where knights showed off their skills at jousting and in mock battles.



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