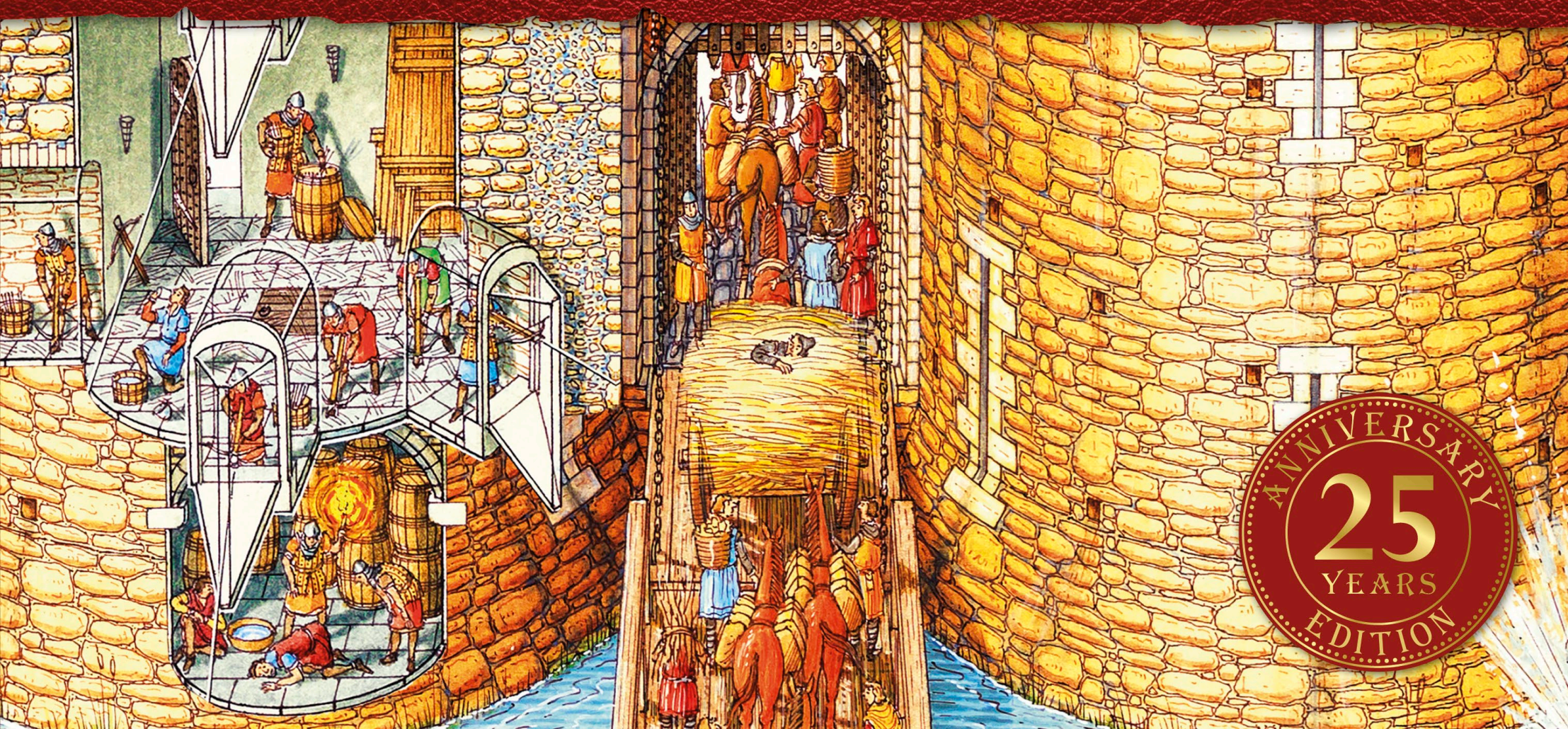


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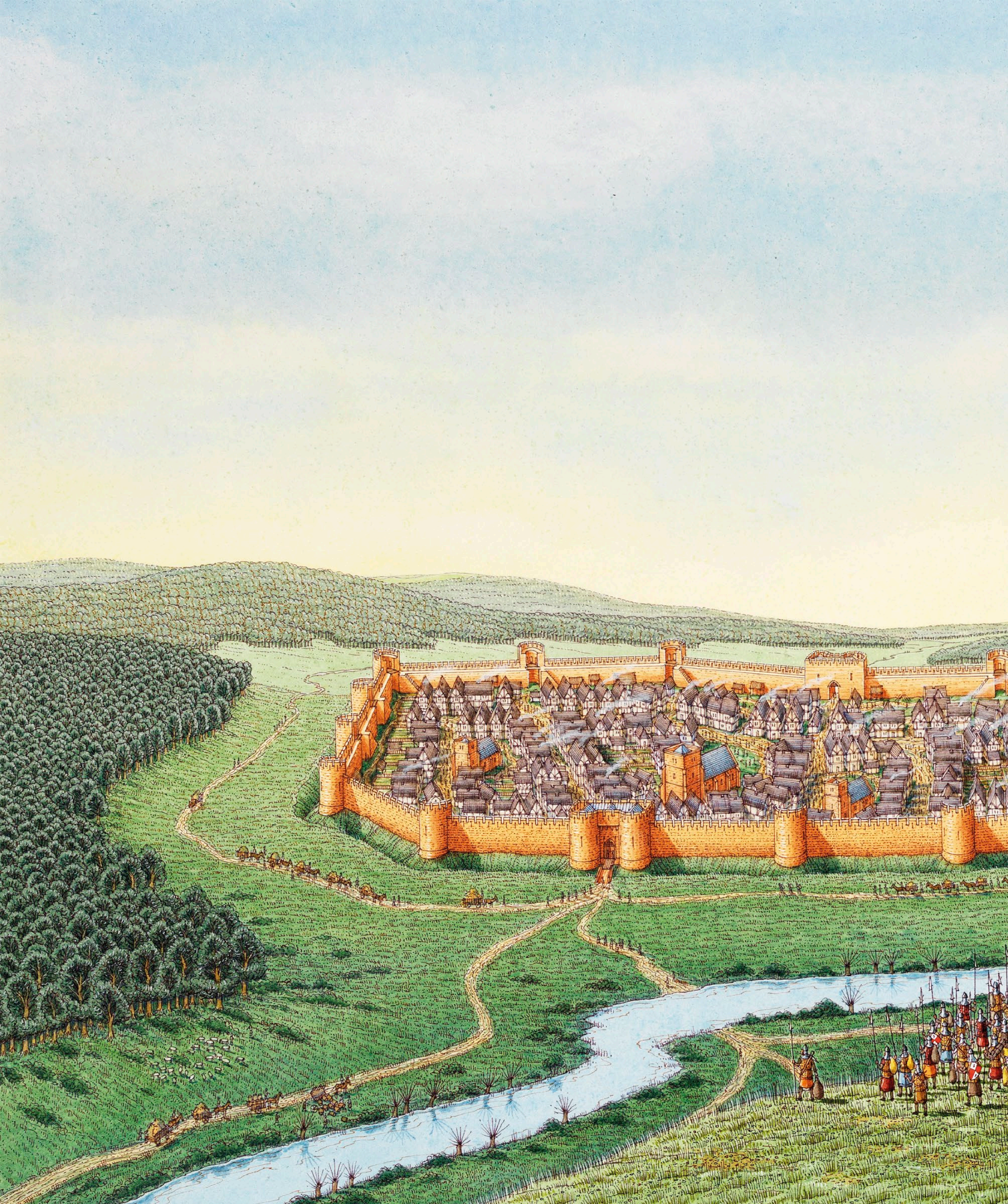




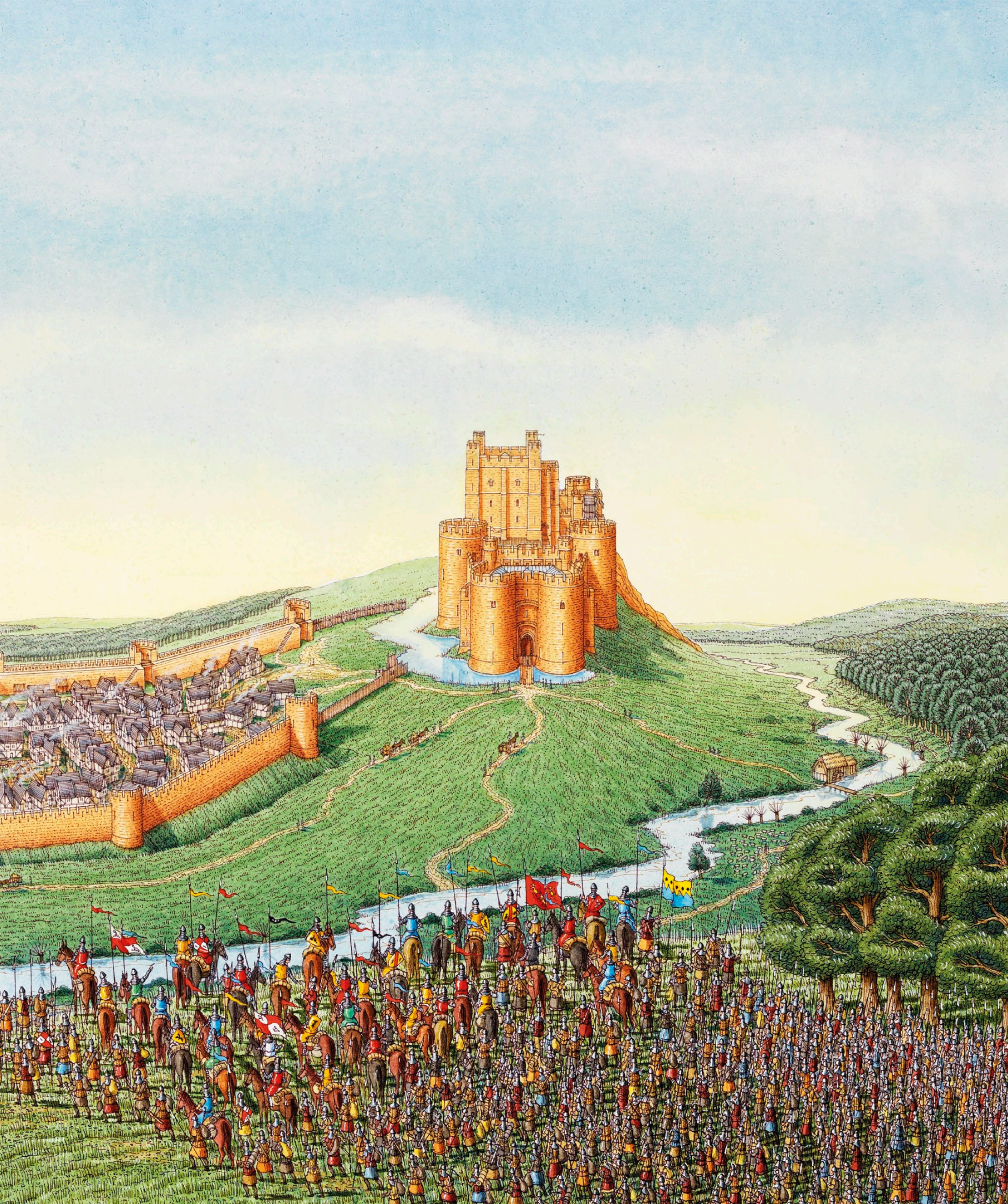
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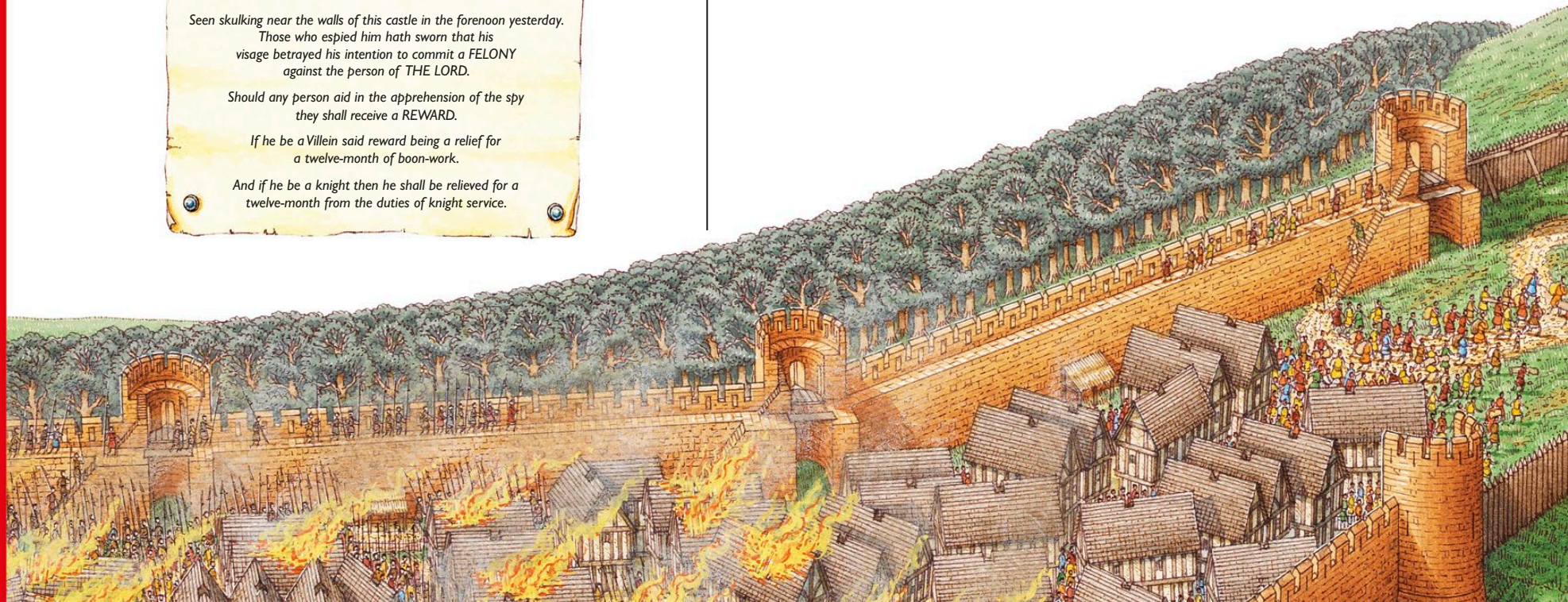
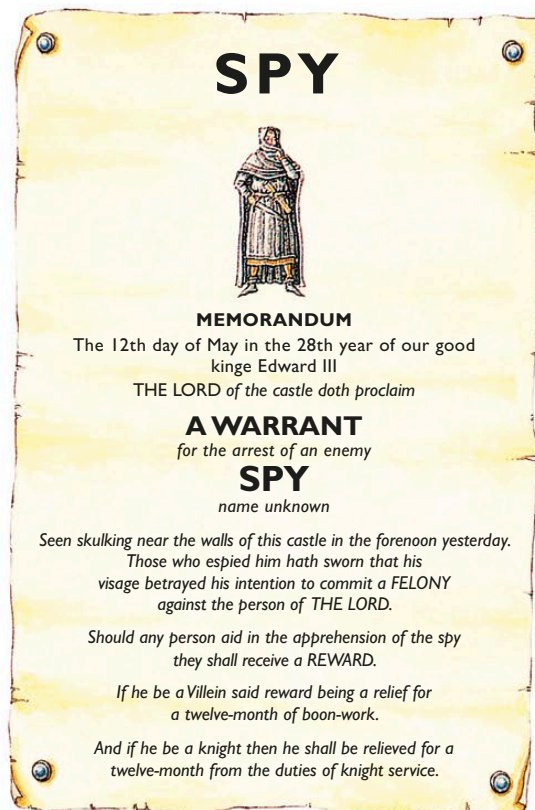
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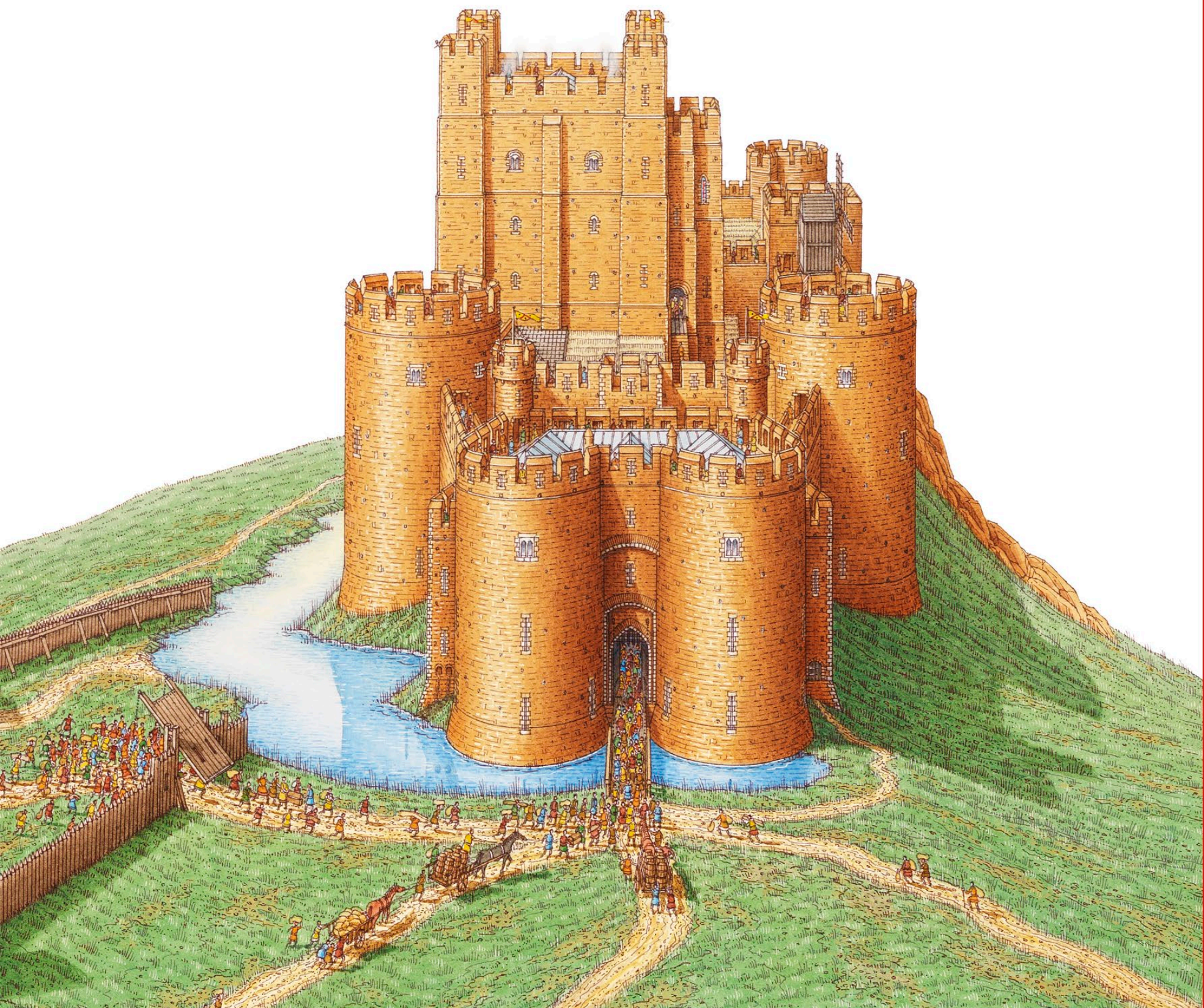




# STEPHEN BIESTY'S CROSS-SECTIONS CASTLE

ILLUSTRATED BY  
STEPHEN BIESTY

WRITTEN BY  
RICHARD PLATT





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# Introduction

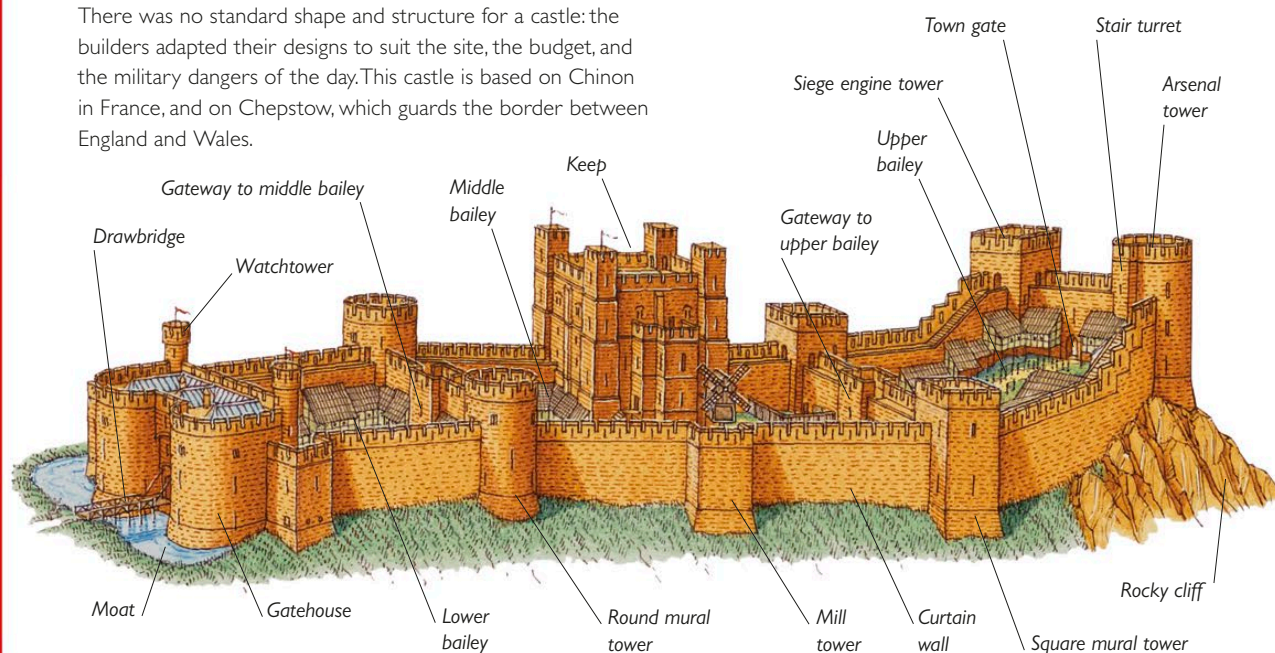


**TOWERING HIGH** above the landscape, European castles still look commanding. Imagine, then, how powerful a castle looked 600 years ago when it was new. Bright flags flapped from the towers. Sunlight glinted from the armour of soldiers patrolling the walls. A castle was built to impress. It was the fortified home of a powerful warlord. From its safety he ruled the surrounding land.

The castle shown here dates from around 1350, but castle building began in the 10th century. The first castles replaced temporary wooden forts. Castles evolved and became stronger as methods of warfare changed. In the pages that follow, you'll see how warriors surrounded and attacked a castle, how the people in the castle prepared for war, how they defended themselves, and how they lived in peacetime.

## The anatomy of a castle

There was no standard shape and structure for a castle: the builders adapted their designs to suit the site, the budget, and the military dangers of the day. This castle is based on Chinon in France, and on Chepstow, which guards the border between England and Wales.

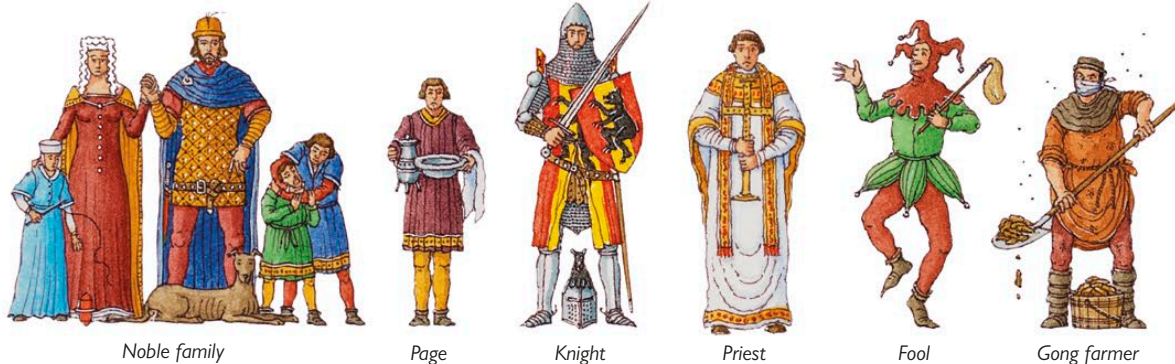


### Castle defences

High walls and solid towers were the castle's main defence. They kept out the attacking soldiers, and the parapets (the walls' jagged tops) provided the defenders with a safe clear view over the surrounding land. Every castle also made maximum use of the

natural features of its site. By building the castle on a high point, the defenders had gravity on their side. Attacking warriors had to struggle up a slope to reach the stronghold, while facing a devastating shower of arrows from the defenders on the walls.

### Castle personalities



The noble family were at the centre of castle life. Everyone else served or protected them. The page was a young servant, but like the knight who fought for the lord, he also came from a noble family.

A humble priest led the family's worship and acted as secretary. The fool entertained them, and a host of other workers, such as the gong farmer, kept life in the castle comfortable – or at least bearable.



#### Moat

A water-filled ditch enclosed the castle on the two sides that were not protected by cliffs. Fish and fowl from the moat also provided food for the castle.



#### Wall

A high wall surrounded the castle. Towers enabled the defenders to see anyone approaching the castle, and to fire at them with bows or siege engines.



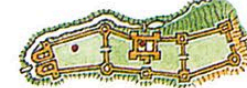
#### Gatehouse

The first point of attack was usually the main entrance. A sturdy gatehouse protected the way in to the castle. Fiendishly clever traps awaited the intruder.



#### Bailey

The wall enclosed several courtyards, each called a bailey. In war, animals and villagers sheltered here; in peacetime, these areas housed workshops.



#### Wells

A water supply was vital, especially if the castle was surrounded. Wells, dug into the rock below the castle, provided water for drinking and washing.



#### Keep

The lord and his family lived at the heart of the castle, in the keep. If the castle was attacked, the defenders retreated to the keep, and fought to the death.

#### Thick walls

The thickness of castle walls made them very strong. Most were more than 2.5 m (8 ft) thick, and the walls of castle towers were thicker still.

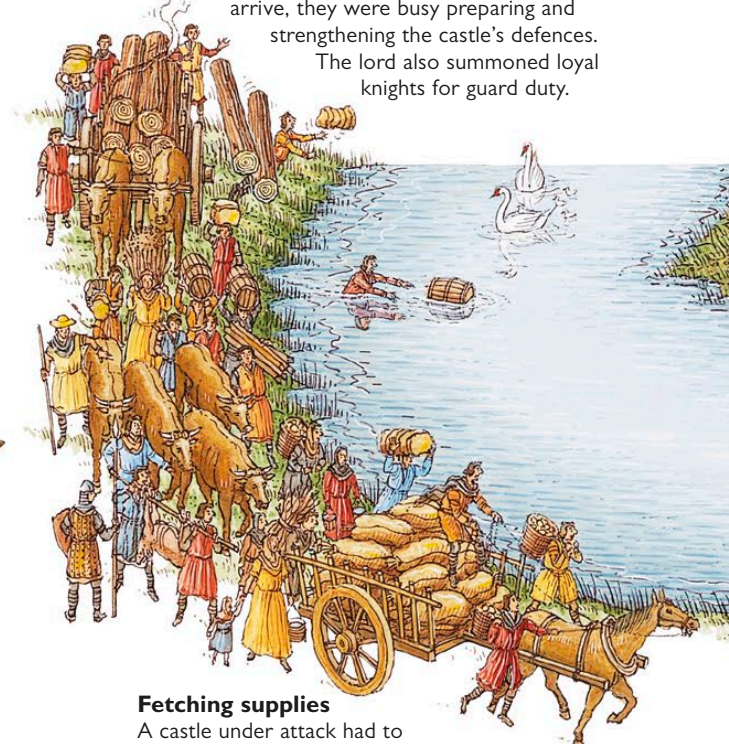
Rough limestone masonry

Rubble (rocks) mixed with mortar

Internal walls were plastered smooth

#### Preparing for the battle

Surprise attacks on castles were unusual. More often, the castle defenders had plenty of warning of an attack. While they waited for the enemy to arrive, they were busy preparing and strengthening the castle's defences. The lord also summoned loyal knights for guard duty.



#### Fetching supplies

A castle under attack had to survive on its stockpiles of food and other supplies. So before the fighting started, the castle guard collected all they could. This often left the peasants in the countryside with nothing to eat.





**Crenels**

The gaps between the raised sections of stonework were called crenels. The raised sections themselves were called merlons. Embrasures were arrow loops (slits) built into the merlons.

**You can't get the staff**

Watchmen were among the worst paid members of the garrison. They were paid about the same as farm labourers, and received only one-fifth of the pay of skilled workers such as crossbow makers.

**Women and children first**

Women and children took shelter in the castle when fighting began. But if food ran out, the defenders ejected anyone who couldn't fight. In the French town of Calais in 1346, the defenders threw out the sick and injured. The attackers would not let them pass, and many starved to death. The survivors ate anything they could find, including dogs and rats.

**Hoardings**

The most important preparation for battle was to build hoardings. These were wooden extensions to the wall-walk, which protected the defenders.

**Watch-turret**

A high tower raised above the castle walls gave a fine view over the nearby countryside. Some castles, such as Urquhart in Scotland, were sited especially to provide the best possible view.



**Roofing**

Attacking armies often fired flaming arrows over the walls to set fire to thatched roofs inside, so castle roofs were constructed from fireproof materials where possible. Lead, tile, or slate were best.

**Fine leather binding**

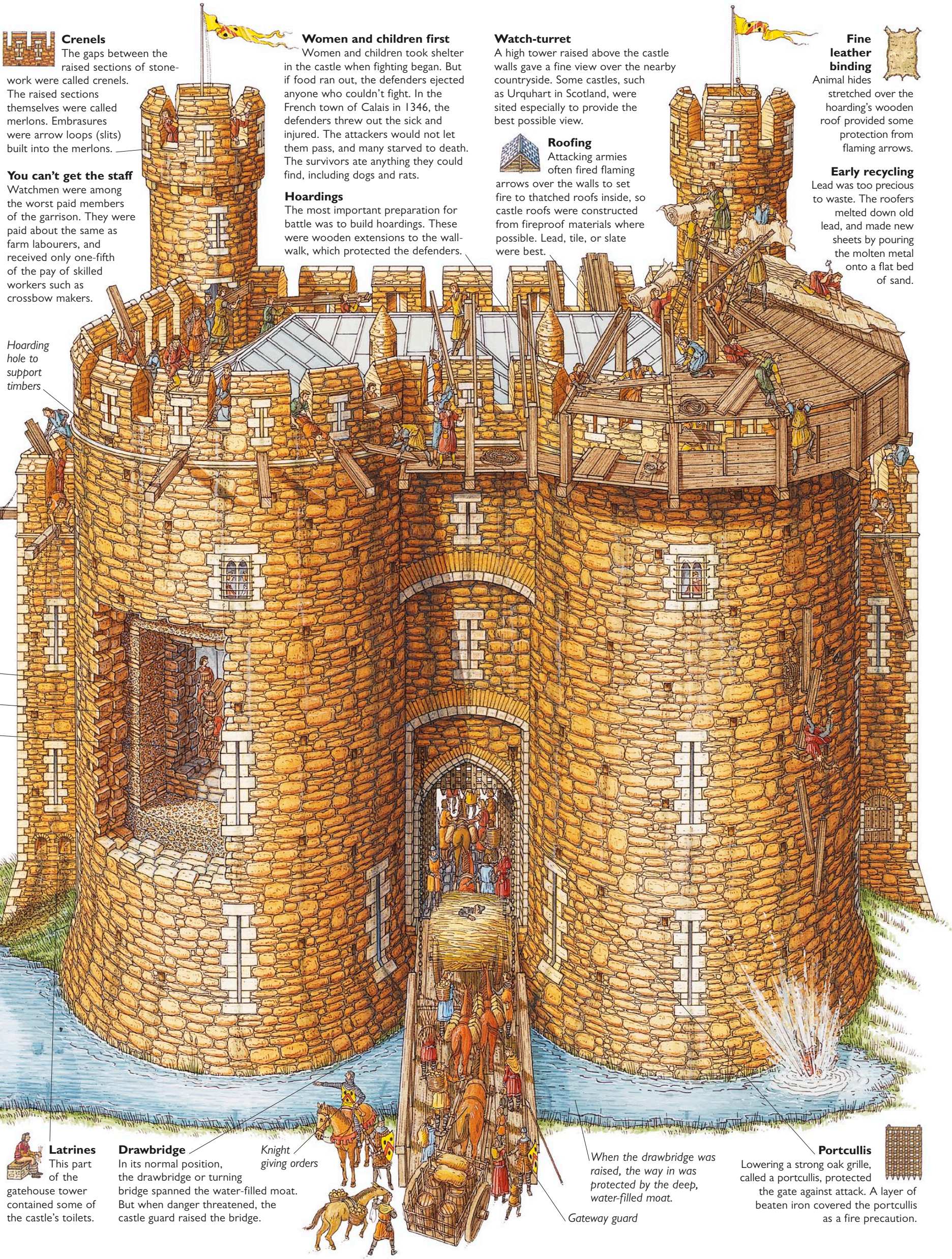


Animal hides stretched over the hoarding's wooden roof provided some protection from flaming arrows.

**Early recycling**

Lead was too precious to waste. The roofers melted down old lead, and made new sheets by pouring the molten metal onto a flat bed of sand.

Hoarding hole to support timbers



**Latrines**

This part of the gatehouse tower contained some of the castle's toilets.

**Drawbridge**

In its normal position, the drawbridge or turning bridge spanned the water-filled moat. But when danger threatened, the castle guard raised the bridge.

*Knight giving orders*

*When the drawbridge was raised, the way in was protected by the deep, water-filled moat.*

*Gateway guard*

**Portcullis**

Lowering a strong oak grille, called a portcullis, protected the gate against attack. A layer of beaten iron covered the portcullis as a fire precaution.





# Defence and siege



**IN PEACETIME**, the castle could be a home, an administrative centre, a storehouse – even a market. But in wartime, the castle threw off

these peaceful disguises. It became a fortress, in control of a wide area. When hostile armies surrounded the castle, soldiers raised the drawbridge and prepared for a furious fight. A siege had begun!

Inside, the castle garrison waited for reinforcements, or just hoped the attackers would go away. The besieging army waited for the inhabitants to die of hunger or disease. The attacking soldiers spent the long hours of waiting trying to break into the castle. If they were successful, they swarmed inside. Often the attackers bribed someone inside the castle to open the gates. Sometimes the siege ended because attackers and defenders made a formal agreement, a lot like a modern peace treaty.



### Signalling a siege

A siege formally began only when the attacking forces fired their siege weapons against the castle walls. Until this signal, the commander could surrender his castle and its inhabitants without shame.

### Trebuchet

The trebuchet was a large siege engine, which hurled projectiles high in the air – over the castle walls – up to a distance of 300 m (980 ft). It was powered by a counterweight, which swung the long end of the arm up and over to release the missile.



### Mangonel

The mangonel threw projectiles on a low trajectory (they did not fly high in the sky). Rocks fired from the mangonel smashed against the castle, rather than flying over the wall into the bailey.



### Bats in the belfry

The biggest siege engine was the belfry (bell tower). This huge wooden tower was tall enough to look over the castle walls.

### On your marks...

The belfry could hold hundreds of men. At the 1266 siege of Kenilworth Castle, 200 archers and 11 catapults operated from a single tower.

Lowering the drawbridge allowed attacking soldiers to swarm across into the castle

### Pull up the ladder

Only desperate or foolish soldiers tried to scale the walls on ladders, because they were defenceless as they climbed the swaying poles.

Hook to secure top of ladder

Soldiers operating drawbridge

Lowering ladder into position

### Murderous missiles

The trebuchet didn't just fire rocks: soldiers also loaded it with pots of lime, which burned the skin, or dead animals, hoping to introduce disease into the castle. For a really grisly attack, besiegers fired severed human heads.

Counterweight swings arm over

### Fast and far

The range of the mangonel was about 400 m (1,300 ft): substantially more than the trebuchet.

### Accuracy

A skilled bowman could put an arrow straight through an arrow slit, but even the best archer needed 5 or 6 attempts to be sure of hitting the target.

Pulley

Archer preparing incendiary arrow

Carrying materials to fill in moat

Archers firing incendiary (flaming) arrows

### Counterweight

The simplest trebuchets had no counterweight. Instead, troops just pulled down on the shorter end of the arm.



### Mantlet

A portable barrier called a mantlet provided protection for archers or miners who were within range of the castle's defenders.

Catapulting severed heads

### Miner problems

If the castle resisted attack, soldiers called sappers tried to break in by mining – digging tunnels under the walls to make them collapse.

### Pass the bacon

Once the sappers were under the walls, they lit a fire to destroy the wooden props supporting the tunnel and make the mine collapse. At one siege in 1215, the commander ordered "forty of the fattest pigs, of the sort least good for eating" to fuel the fire.

### Cats, rats, and tortoises

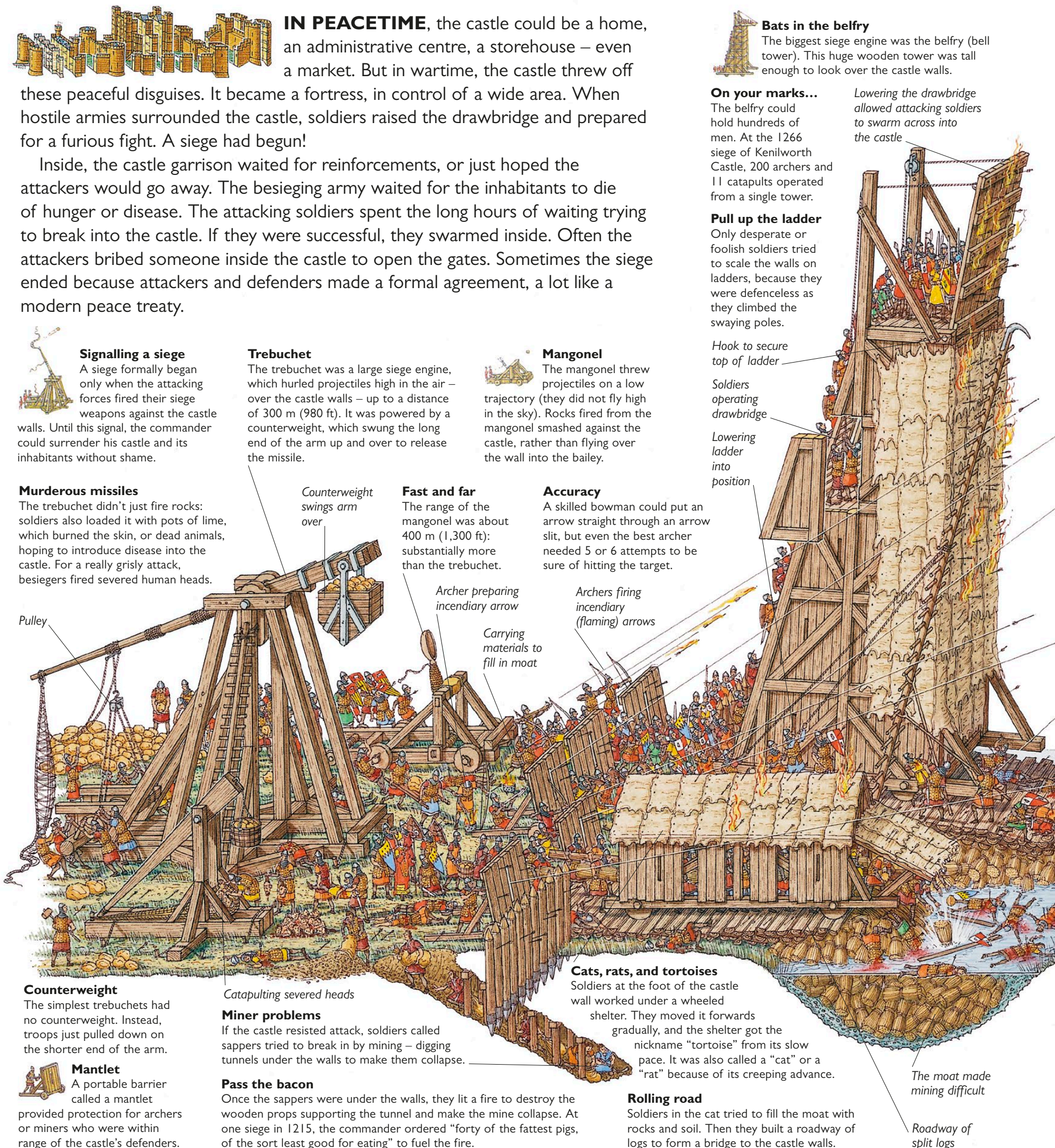
Soldiers at the foot of the castle wall worked under a wheeled shelter. They moved it forwards gradually, and the shelter got the nickname "tortoise" from its slow pace. It was also called a "cat" or a "rat" because of its creeping advance.

### Rolling road

Soldiers in the cat tried to fill the moat with rocks and soil. Then they built a roadway of logs to form a bridge to the castle walls.

The moat made mining difficult

Roadway of split logs





**Picking a quarrel**  
The arrows of crossbows were called quarrels or bolts. The garrison stored them in barrels ready for immediate use.

**Push off!**  
A simple forked stick was the best defence against ladders.

**Hoarding**  
In times of tension, soldiers extended and protected the wall-walk and towers with a wooden corridor called a hoarding. From the hoarding they dropped rocks, boiling water, and quicklime to burn the skin of the forces below.

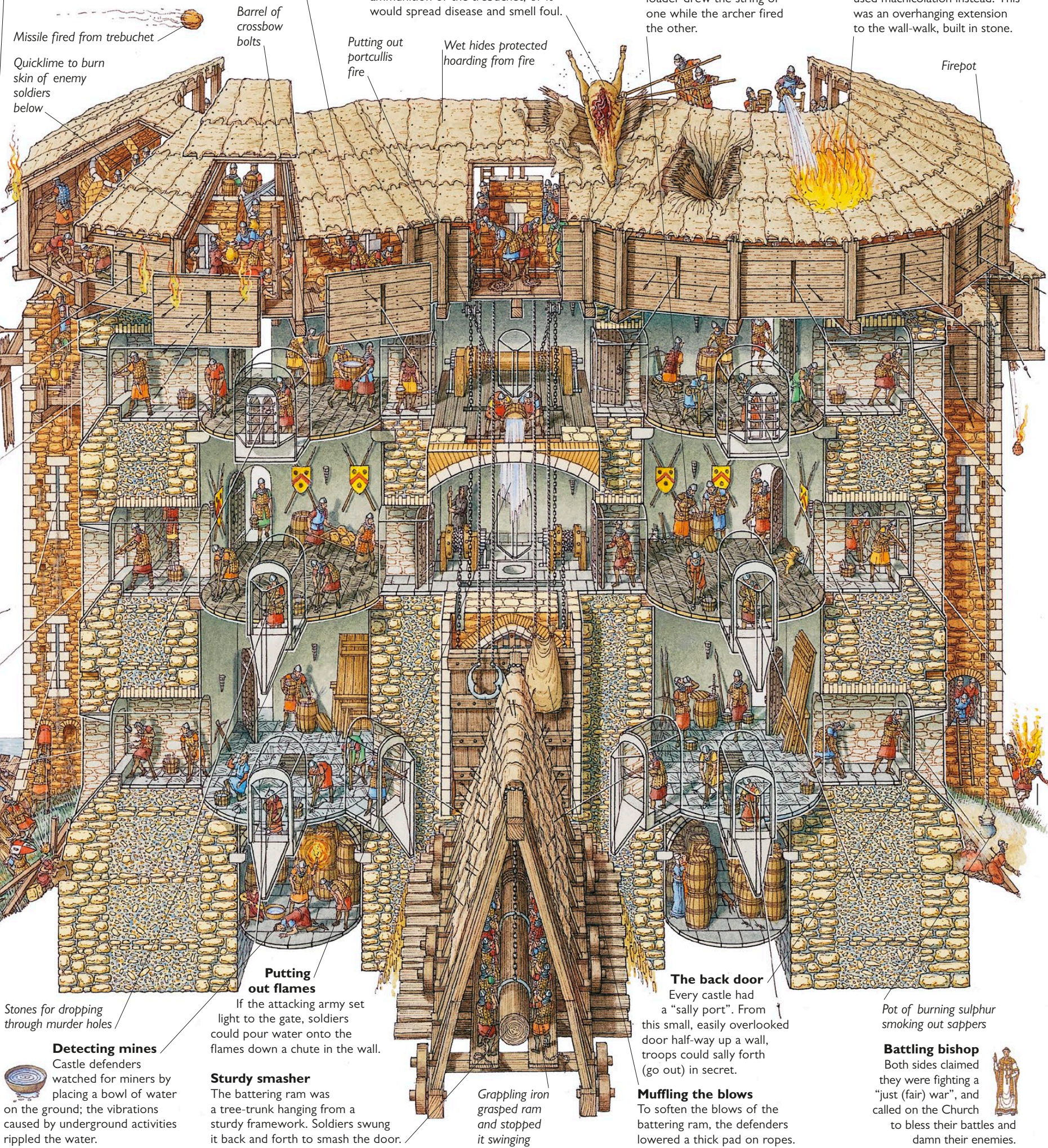
**Crossbow**  
The main weapon of defence at this castle was the crossbow. It was a powerful weapon: the bolt, or quarrel, of a crossbow could pierce armour. The crossbow had other advantages, too: it was very accurate and it could be fired in confined spaces.

**Peaceful pounder**  
Even in peacetime, castle commanders found uses for their trebuchets: during a tournament of love, a trebuchet provided the watching ladies with a precision bombardment of roses.

**Firepot**  
Pots filled with flaming liquids such as tar set fire to anything below when they smashed.

**Loader**  
To keep the archers busy, each had two bows. A loader drew the string of one while the archer fired the other.

**A nice blaze**  
Flaming arrows could ignite the whole hoarding, so later castles used machicolation instead. This was an overhanging extension to the wall-walk, built in stone.



Missile fired from trebuchet  
Quicklime to burn skin of enemy soldiers below

Barrel of crossbow bolts

Putting out portcullis fire

Wet hides protected hoarding from fire

Firepot

Stones for dropping through murder holes

**Putting out flames**  
If the attacking army set light to the gate, soldiers could pour water onto the flames down a chute in the wall.

**Detecting mines**  
Castle defenders watched for miners by placing a bowl of water on the ground; the vibrations caused by underground activities rippled the water.

**Sturdy smasher**  
The battering ram was a tree-trunk hanging from a sturdy framework. Soldiers swung it back and forth to smash the door.

**The back door**  
Every castle had a "sally port". From this small, easily overlooked door half-way up a wall, troops could sally forth (go out) in secret.

Pot of burning sulphur smoking out sappers

**Muffling the blows**  
To soften the blows of the battering ram, the defenders lowered a thick pad on ropes.

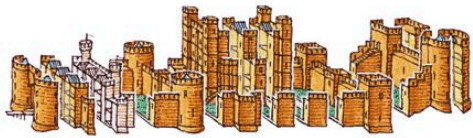
**Battling bishop**  
Both sides claimed they were fighting a "just (fair) war", and called on the Church to bless their battles and damn their enemies.

Grappling iron grasped ram and stopped it swinging





# Garrison and prisoners



**THE GROUP OF SOLDIERS** guarding the castle was called the garrison. The men of the garrison spent much of their time in the massive gatehouse that controlled the entrance. Within its sturdy walls there were ingenious gates and deadly traps. Only the most determined invasion force could enter the castle once the garrison had secured their stronghold.

The gatehouse was also the castle prison. The towers' massive construction meant that they kept prisoners in just as effectively as they kept invaders out. Noblemen captured in battle had luxury quarters high up in one of the gatehouse towers. They were held until their family paid a ransom (a large fee). While they waited, ransom prisoners lived almost as well as the lord himself. Few prisoners were this lucky, though. Most shivered and starved in the dungeons – the basement prisons beneath the gatehouse floor.

## Feudal system

The lord of the castle (usually a wealthy knight or baron) did not own the land in the sense that we understand today. The lord earned the right to use the land and build his castle by swearing an oath of loyalty to a baron – a more important lord – or to the king himself. The lord also promised to do knight service (to fight on horseback) if the king needed his help in war. Under the lord's control were the many people who lived on the land. The lord protected them, in exchange for fines or fees.

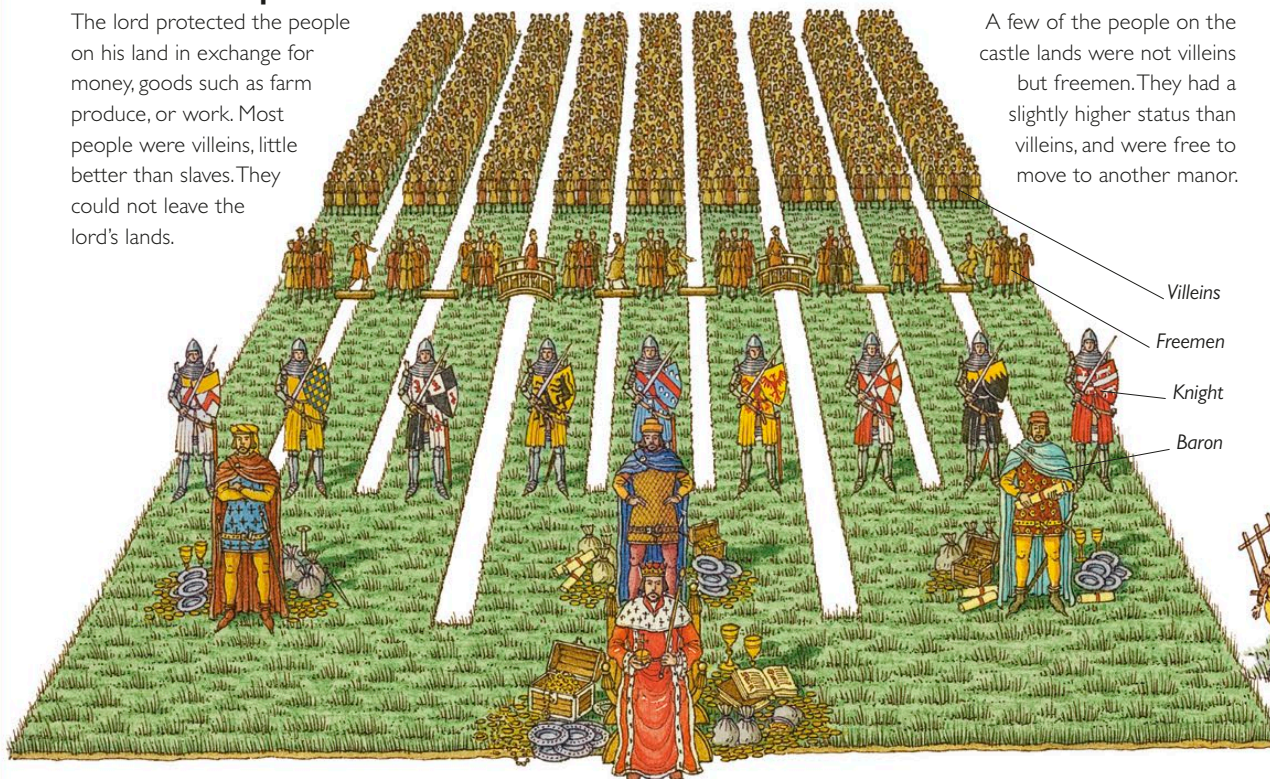
This social structure was called feudalism.

### The villein or peasant

The lord protected the people on his land in exchange for money, goods such as farm produce, or work. Most people were villeins, little better than slaves. They could not leave the lord's lands.

### The freeman

A few of the people on the castle lands were not villeins but freemen. They had a slightly higher status than villeins, and were free to move to another manor.



### The baron

Barons were very wealthy noblemen who swore allegiance directly to the king. In exchange, he gave them huge areas of land. The barons were often in the presence of the king, and some had special duties.

### The king

At the top of feudal society, the king ruled over everyone in the country. At least, that was what he thought. In fact, powerful barons in some feudal societies allowed the king to rule only as long as he agreed with them.

### The knights

Barons could not control all their land without help, so they in turn divided it between rich knights. Each knight swore allegiance to a baron, and owed him 40 days' knight service a year.

## Bastard feudalism

By the 14th century, when this castle was complete, feudalism had evolved. Instead of knight service, the lord paid money to the king or baron, who used it to hire soldiers, known as mercenaries, when he needed them. This system was called bastard feudalism.



### Herbal remedies

Sweet-smelling herbs hanging in bundles on the wall perfumed the air. Herbs on the floor, called strew, gave out a pleasant aroma when crushed underfoot.

### Guard duty

A wealthy man who farmed the lord's land paid rent by contributing to the castle guard. He had to provide soldiers, weapons, armour, and sometimes horses. These duties resulted from the act of homage, when the man put his hands between those of his lord and swore to "be his man". "Paying homage" still means performing duties for a more important person, or promising to.



### Are you sitting comfortably?

The toilets were not nearly as primitive as you might imagine: They often had wooden seats, and some even had wash basins. There was no toilet paper, but a handful of hay did the job almost as well.

### Yoo-hoo!

"Murder holes" in the gateway provided a handy way of shouting orders, but this was not their main function. If enemy soldiers got through the outer door, the garrison dropped the portcullis, and archers then picked off the enemy one by one.

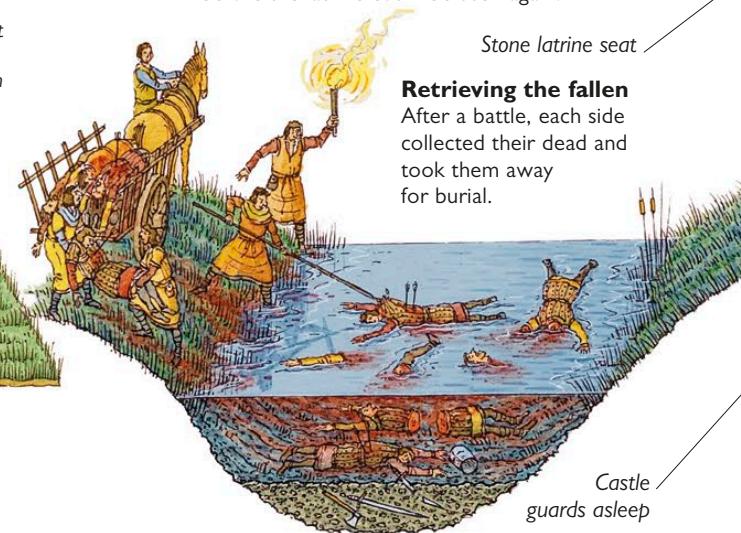
### Constable's quarters

The most luxurious room in the gatehouse was the constable's. This important man controlled the castle when the lord and his family were not at home. He was responsible for every aspect of day-to-day routine: for authorizing spending on building and repairs, for supplying provisions, and for the security of prisoners.



### A slippery climb

Invaders desperate to get inside the castle even tried clambering up the latrine shaft, and this approach broke the siege of Château Gaillard, on the River Seine in France, in 1204. However, if the invaders got stuck and died in the attempt, the drains needed a good cleaning before the latrine could be used again.



### Retrieving the fallen

After a battle, each side collected their dead and took them away for burial.

Castle guards asleep

Constable's servants asleep



### Mustn't grumble

The life of ransom prisoners was really quite good. They may even have had the freedom to roam around the castle. Their captor granted these privileges because the prisoner gave his word not to try and escape. Some ransom prisoners also signed a document upon surrendering, in which they agreed to be obedient prisoners, that they would pay the ransom, and they recognized that breaking the terms would bring dishonour on them.



**Look-out**  
Nicknamed "Jim Crow" because of his lofty perch, the look-out

sounded a series of coded calls on his hunting horn to signal the approach of friends or enemies.

**What a pong!**

Windows in the latrine tower provided plenty of ventilation (glass was a rare luxury).

Watch-turret

Latrine tower

Standards were decorated with the coat-of-arms of the lord

**Winch room**

The portcullis that protected the castle gateway was very heavy. The garrison used a winch so that two men could lift it between them. Lowering the portcullis was easy: knocking out a stop or brake let it drop quickly to trap intruders.

**Draught excluder**

Costly tapestry hangings over the doors kept out the howling castle draughts.

Portcullis

Slot for portcullis

**Chimney**

Only later castles had chimneys. The hot air rising up the chimney created a draught that kept the fire below blazing, sucking smoke from the room. Some early castles simply had a hole in the roof, and the fire burned in a grate in the middle of the floor. Others had fireplaces, which vented through openings in the wall.

Sleeping mattress stuffed with straw

Ransom prisoner

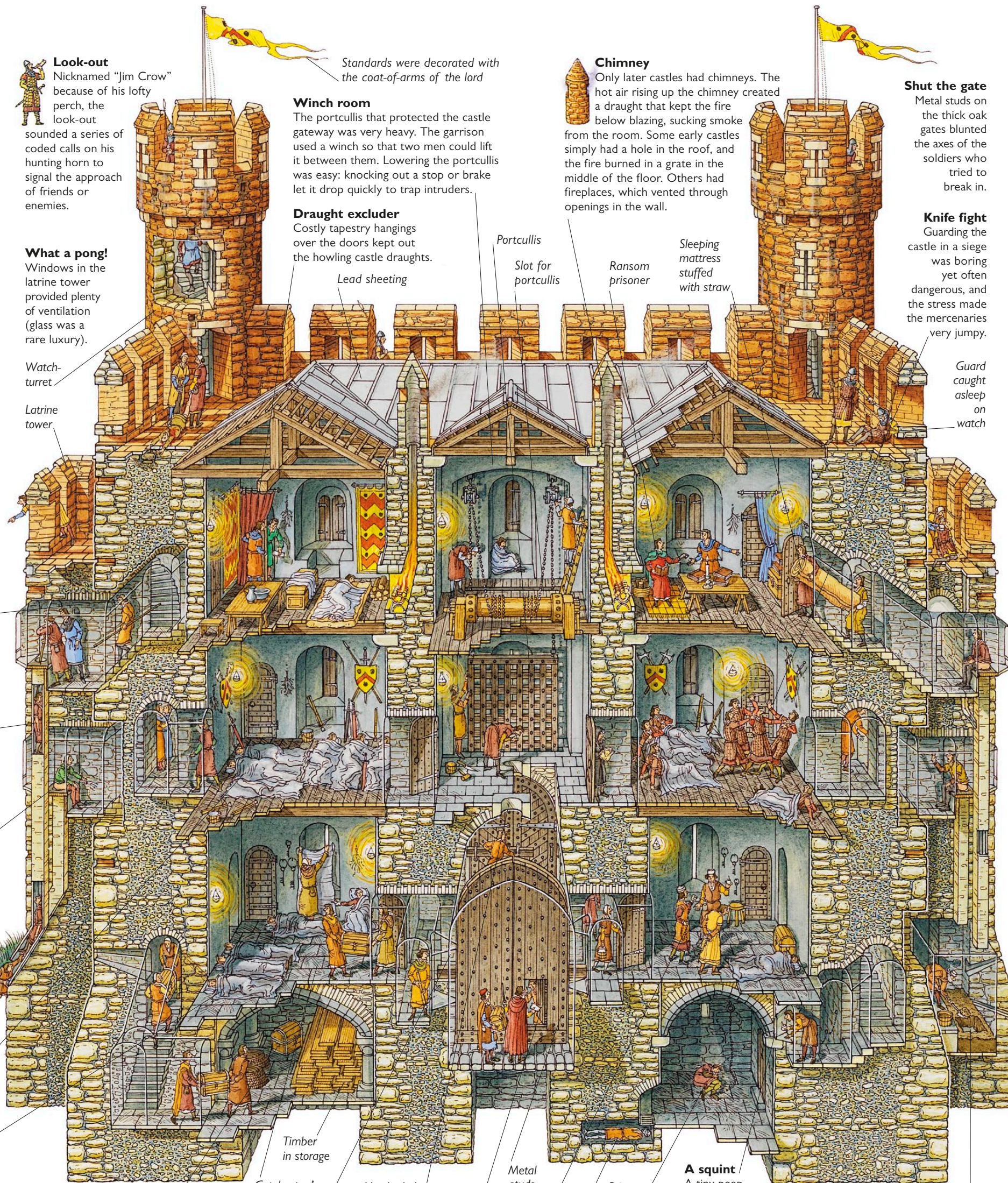
**Shut the gate**

Metal studs on the thick oak gates blunted the axes of the soldiers who tried to break in.

**Knife fight**

Guarding the castle in a siege was boring yet often dangerous, and the stress made the mercenaries very jumpy.

Guard caught asleep on watch



Timber in storage

Gatekeeper's room

Murder hole

Metal studs

Prisoner in chains

**A squint**  
A tiny peep hole called a squint allowed the gaoler to check on his charges.

**Treasure chest**

The constable guarded the valuables of the castle, and was probably quite wealthy himself. The job of constable was usually well paid, and provided many extra opportunities to get rich.

**Peep holes**

Loops in the entrance arch allowed guards to inspect visitors in safety.

**Gates within gates**

Even in peace time the garrison shut the castle gates at night. Visitors entered through a wicket gate – a small door within the main gate.

Gaoler takes a fee for accepting another prisoner

**Forget-me-not**

Hidden at the back of the dungeon was a cramped cell-within-a-cell. This "oubliette" took its name from the French word *oublier*, to forget. Unwanted prisoners were pushed into the oubliette and forgotten.

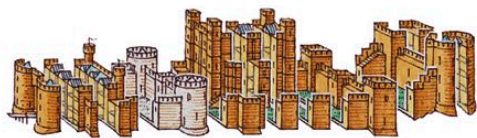
**Smelly job**

Emptying the latrine pit was an unpleasant and unhealthy task. The unfortunate worker with the bucket and spade was called a "gong farmer".





# Building the castle



**CASTLES WERE VERY EXPENSIVE** to construct and repair. Only the most rich and powerful lords could afford to build them, and they picked castle locations with great care. They chose positions that they knew would be important to hold in a battle.

However, castle-builders didn't just think about warfare. They planned for peacetime, too. The castle was a home, so there had to be ample supplies of food and fuel within easy reach. It was also a centre of administration for the lord of the manor, and usually had to be within a day's walk of his lands.

Finally, the site itself was important. The castle needed solid foundations to take the weight of the massive walls. Perhaps most important of all, within the castle walls there had to be a source of clean drinking water to supply the defenders and their livestock during a siege.

## Stone masons



The master mason was highly paid, often a foreigner, and travelled from castle to castle to supervise construction. Under the master mason worked free masons. They were skilled masons who could carve stone into any shape required. The lowest grade of mason was the rough mason. He cut simple shapes, and prepared complex work for the free mason.

## Nails

An important part of the blacksmith's work was making nails (screws were not invented until the 16th century). The nails were not strong enough to hammer in directly: craftsmen first made a hole with a gimlet.



Wooden pegs held beams together



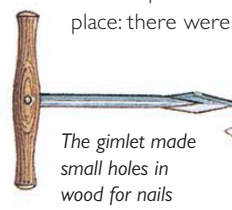
The blacksmith formed nails from hammered lengths of wire



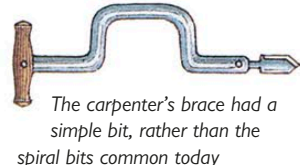
York castle in 1327 had a stock of 43,000 nails

## Selection of tools

Craftsmen used to make many of their own tools, or have them made locally by the blacksmith. Shapes of tools varied from place to place: there were no standard designs.



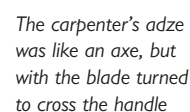
The gimlet made small holes in wood for nails



The carpenter's brace had a simple bit, rather than the spiral bits common today



Brushes were simply bundles of hair tied to a handle



The carpenter's adze was like an axe, but with the blade turned to cross the handle

## Licence to crenellate

Building a castle needed royal permission. This was called "licence to crenellate", because it was the crenellations (battlements) that made a castle different from all other buildings. Adulterine castles (illegally fortified houses) could be seized by the king.

Awarding the licence to crenellate to a lord

The king's scribe or secretary wrote out the licence to crenellate on a sheet of parchment



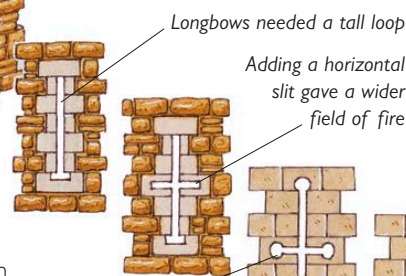
Seals bore an image of the lord  
Wax seal



The king made the document official with a seal (a wax token embossed with a special symbol). A parchment ribbon fixed the seal to the licence.

## Arrow loops

Archers fired through narrow slits, called arrow loops, in the castle wall.



Arrow loops were splayed (spread out) on the inside, so that an archer could take careful aim without exposing himself to fire. Not all slits in the wall were for firing arrows. Many were in place of windows, letting in air and light.

Longbows needed a tall loop  
Adding a horizontal slit gave a wider field of fire  
Circular "oeilllets" may have been cut for larger crossbows  
A few loops have several cross-slits



## Blacksmith

Anything made from metal was costly, because making iron required huge amounts of fuel. To make 25 kg (55 lb) of iron required one mature oak tree.

## Limy cement

Lime – the equivalent of today's cement – was made by heating chalk or limestone in a simple furnace (oven), often built close to the castle site.



## Simple tools

A carpenter made holes with an auger or awl. After every few turns he pulled it from the hole to remove the chippings. Drill bits, which have a spiral groove to remove wood chips continuously, did not appear until the 15th century.

## Hewing stone

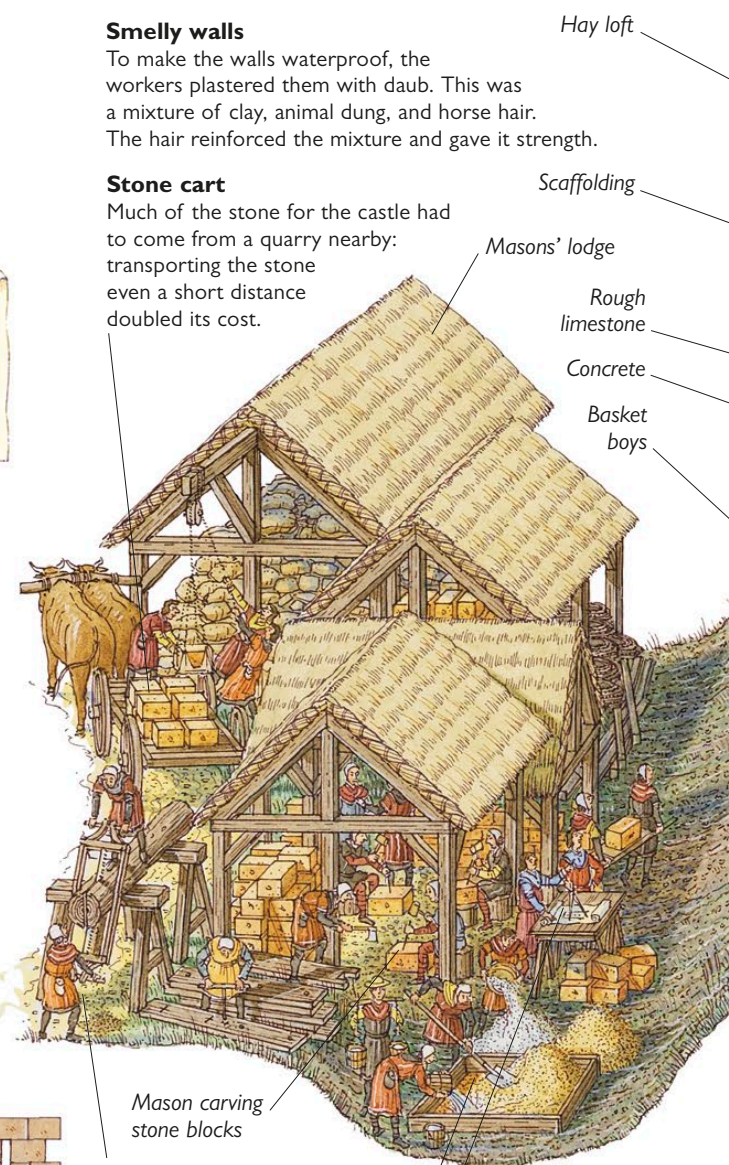
Not all stone was suitable for castle walls. Very hard stones such as granite were difficult to cut. Suitable stone for working was called freestone. The masons trimmed it into ashlar: regular flat-surfaced blocks, and the shapes needed for the arrow loops and arches.

## Smelly walls

To make the walls waterproof, the workers plastered them with daub. This was a mixture of clay, animal dung, and horse hair. The hair reinforced the mixture and gave it strength.

## Stone cart

Much of the stone for the castle had to come from a quarry nearby: transporting the stone even a short distance doubled its cost.



Hay loft

Scaffolding

Masons' lodge

Rough limestone

Concrete

Basket boys

Mason carving stone blocks

## Sawyers

Some sawing went on at the site of the castle, but sawyers (workers who sawed wood) also worked in the forest. There they chopped down trees and cut them into lighter beams.

Master mason discussing progress

## Making mortar

The "glue" that held together the castle wall was mortar: a mixture of lime, sand, and water.



**Lifting gear**

This simple crane was fixed, but more elaborate types, called slewing cranes, rotated to bring the load directly over the rising tower.

**Treadmill**

Two men walked round inside the wheel to turn it and wind up the load, much as a hamster runs in an exercise wheel.

**Wall construction**

The castle wall had a sandwich-like structure. Neatly trimmed blocks of ashlar formed the outside and inside surfaces of the wall. Between these outer layers there was a filling of rubble: stones of assorted size and quality, held together with mortar.

**Scaffolding**

So that they could work on the walls as they grew higher, the craftsmen built scaffolding. Holes in the walls, called putlog holes, supported the inner end of some of the timbers.

**Making bate**

Tannery workers softened animal skins by soaking them in bate. This was water mixed with dog excrement from the castle kennels. After putting this mixture in a vat, a barefoot workman climbed in and trampled it to a pulp.

**Blazing roof**

Thatch was the cheapest of roofing materials, but it burned easily. Attacking forces fired flaming arrows to ignite the thatch, or fired burning barrels of tar from a trebuchet.

**Basket boys**

Mortar and smaller stones went up the castle walls in baskets carried on labourers' shoulders.

**Shingles**

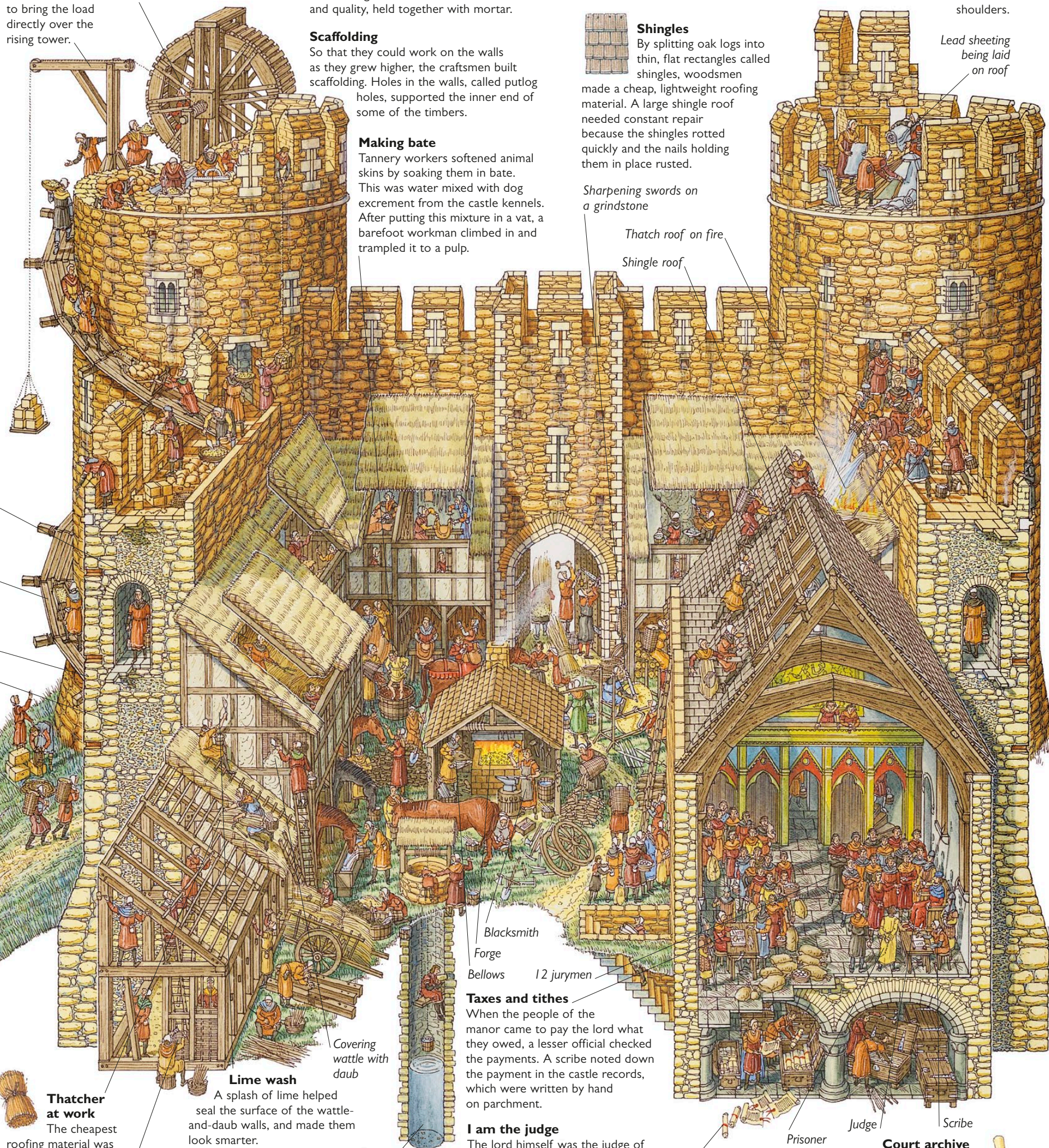
By splitting oak logs into thin, flat rectangles called shingles, woodsmen made a cheap, lightweight roofing material. A large shingle roof needed constant repair because the shingles rotted quickly and the nails holding them in place rusted.

Sharpening swords on a grindstone

Thatch roof on fire

Shingle roof

Lead sheeting being laid on roof

**Thatcher at work**

The cheapest roofing material was thatch. This was a thick covering of reeds, straw, heather, or even bracken.

**Lime wash**

A splash of lime helped seal the surface of the wattle-and-daub walls, and made them look smarter.

**Weaving wattle**

To fill the gaps between the beams, builders wove wattle – panels of flexible hazel twigs.

**Well well!**

A reliable supply of water was essential if the castle was to survive a siege.

Blacksmith

Forge

Bellows

12 jurymen

**Taxes and tithes**

When the people of the manor came to pay the lord what they owed, a lesser official checked the payments. A scribe noted down the payment in the castle records, which were written by hand on parchment.

**I am the judge**

The lord himself was the judge of serious crimes, but for lesser cases an official such as the steward might take his place. A jury of 12 men listened to evidence and decided guilt or innocence in serious cases.

Court documents

Prisoner

Judge

Scribe

**Court archive**

The castle cellar housed court documents. They were called the rolls, because the clerk recorded everything on sheets of parchment (hammered animal skins) that were rolled for storage.



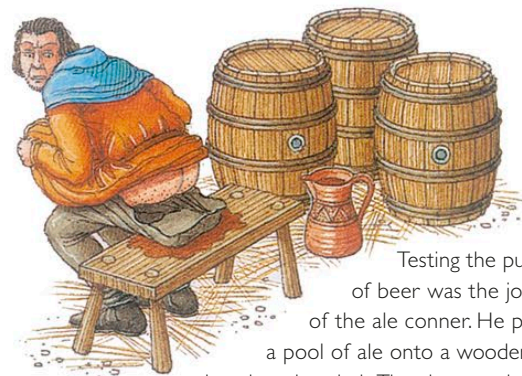
# Trades and skills



**“YOU STUPID** half-witted apprentice! Have you got ale froth for brains? Give me that hammer!” Every day, the high stone walls of the bailey rang with the shouts and curses of the busy craft workers whose workshops clustered around the walls. When things went wrong (which was quite often) it was usually the youngest apprentice, or trainee worker, who got the blame.

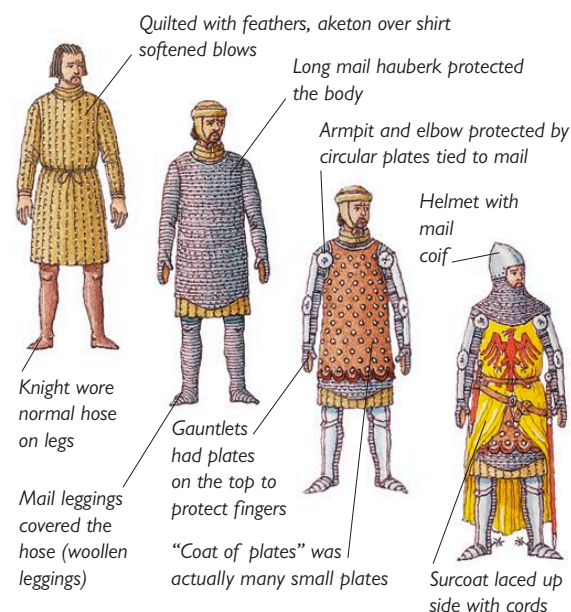
Most manufacturing and processing took place in the castle or nearby. Billowing steam swirled round the wheelwrights as they fitted a metal rim to a cart wheel. Deafening hammering from the armourer almost drowned the gentler squeak of the potter’s wheel, and the whooshing of the wind in the mill sails. The malty smell of fresh-brewed ale mingled with the sizzling of melting fat from the candlemakers.

The ale conner



Testing the purity of beer was the job of the ale conner. He poured a pool of ale onto a wooden bench and sat in it. The ale passed the test if after half an hour his leather britches were not stuck to the bench. Poor quality beer was sugary, and glued him to the seat. The punishment for producing low-quality beer was probably the pillory (see page 26).

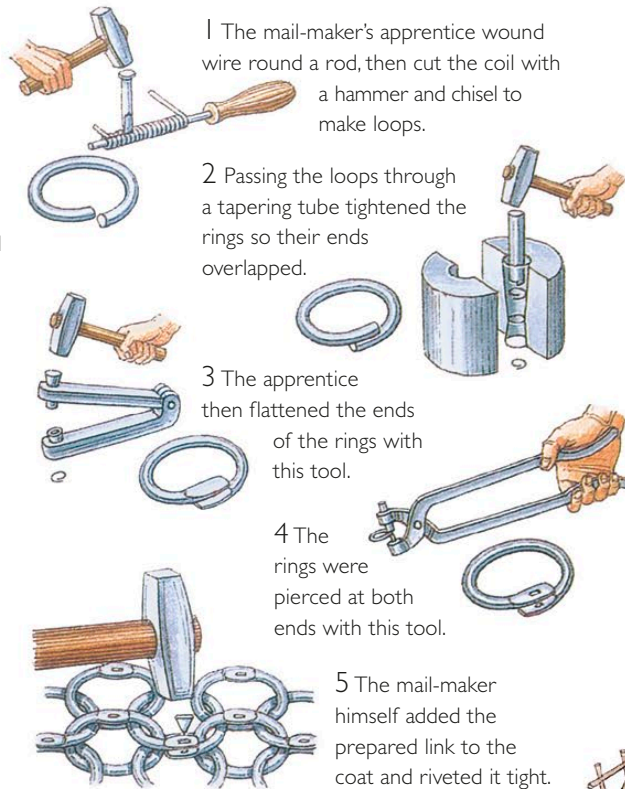
## Dressing a knight



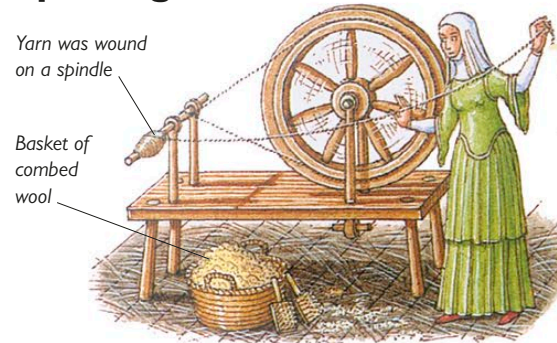
Armour changed and evolved constantly. In the 14th century, knights wore three layers of body armour over their shirts and hose (woollen leggings). The innermost layer, a quilted knee-length coat or aketon, was all that poor foot soldiers could afford. On top of this knights wore chain mail, then a “coat of plates” – overlapping panels of metal riveted to a sturdy shirt. Finally, the surcoat kept the sun off the armour.

## How mail was made

Nobody knows for sure how chainmail was manufactured, but the process was probably as follows:



## Spinning wheel



This was a new invention, and was the very first labour-saving machine to use continuous rotary (turning) motion and a belt drive. Until about 1300, women spun yarn by twisting it onto a distaff – a long pole. The wheel made spinning much faster.



**Plumber**  
The plumber shaped and joined lead sheet and pipes, and his trade took its name from the Latin word for lead, *plumbum*.

**Watching paint dry**  
Painting the walls of the keep with limewash protected it against rain, and also made the castle gleam brilliant white in the sun.

### Keep

When the castle was besieged, the keep was the last place of refuge (hiding), so it was designed to be easily defended. A drawbridge and a steep flight of stairs guarded the entrance in the forebuilding.



**Tailors at work**  
Poor people made their own clothes at home, but wealthy merchants and noble

people employed tailors to sew them fine robes. Crouched over their sewing in damp workshops, tailors often suffered from bad stomachs, curved spines, and lingering coughs.

Armour needed constant polishing to remove rust

### Hermit’s cell

Religious people who did not agree with the teachings of the Church sometimes withdrew to cells (small rooms) in the castle. Educated people valued these hermits or anchorites for their wisdom and holiness. However, their odd habits often made them a source of amusement and curiosity to the ignorant.

Mail being made

### Make do and mend

A suit of armour was very expensive to make. It cost about the same as a car costs today. And like a car, armour was never replaced after a minor accident. The armourer simply bashed out the dents.

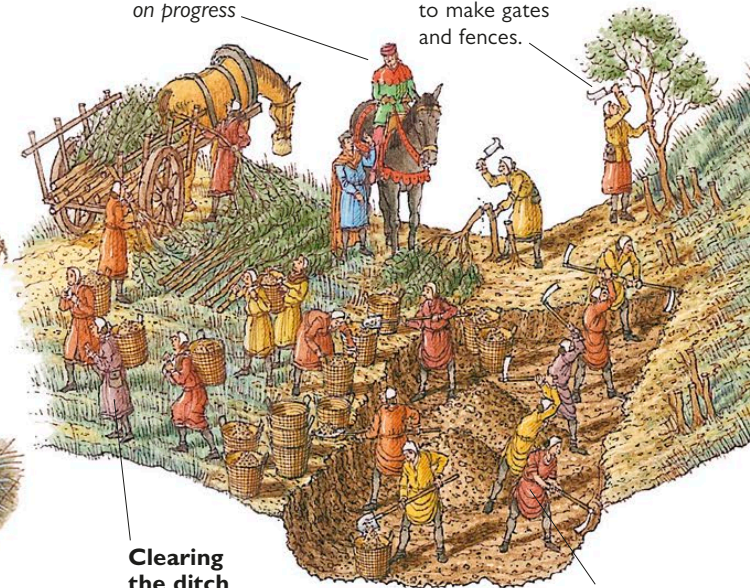


**Fits like a glove**  
The armourer made clothes of metal, so he needed the strength of the blacksmith, and the measuring and cutting skills of the tailor.

Bellows pumping air into the forge

**Cutting brushwood**  
The willow saplings growing in the ditch didn’t go to waste. Farm animals browsed on the leaves, and the hurdle-maker then used the bare branches to make gates and fences.

Official checking on progress

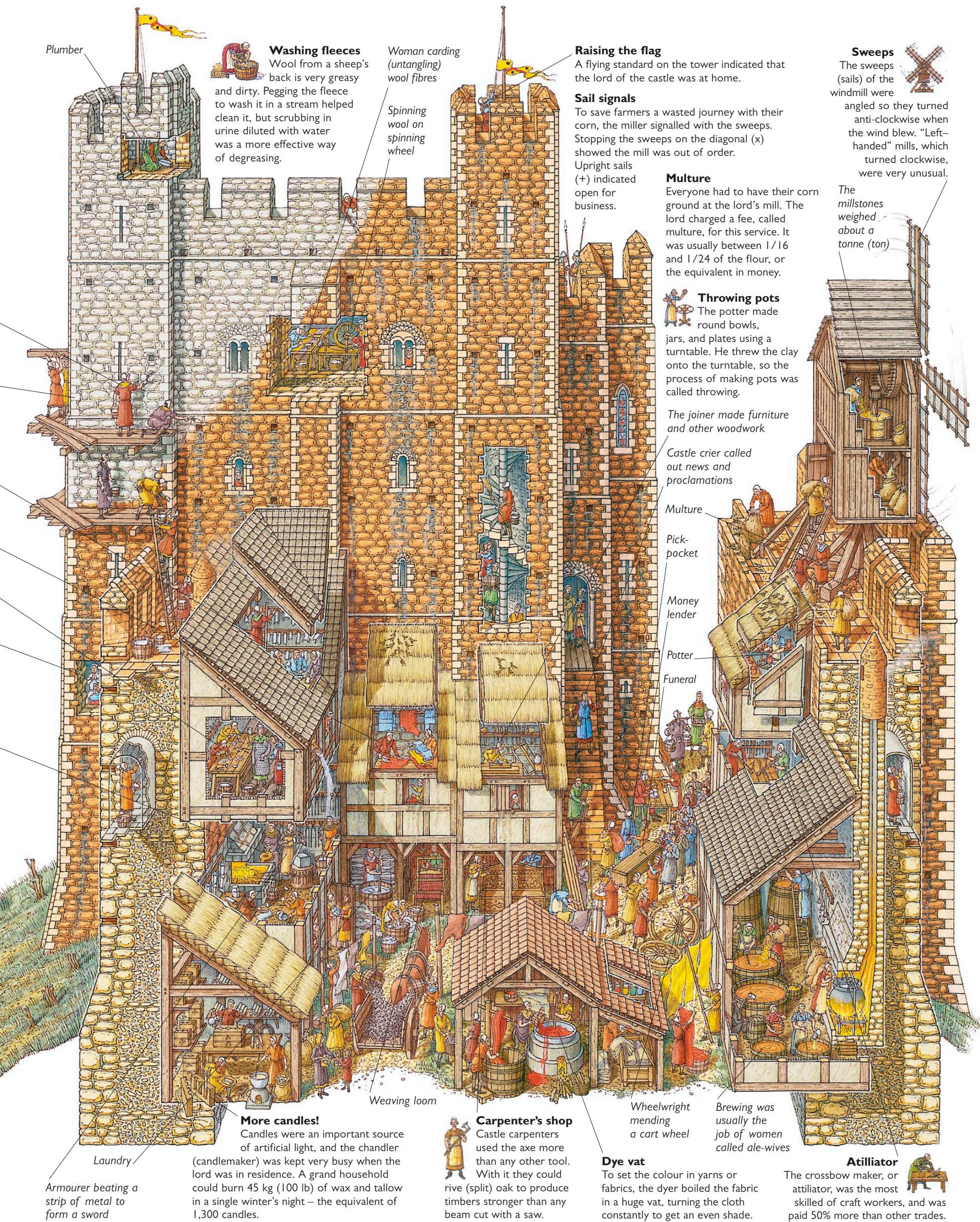


### Clearing the ditch

Workers used baskets to carry the rich mud they dug out from the ditch. They fertilized the nearby fields with the mud.

Workers kilned their tunics up for muddy work





Plumber

**Washing fleeces**  
Wool from a sheep's back is very greasy and dirty. Pegging the fleece to wash it in a stream helped clean it, but scrubbing in urine diluted with water was a more effective way of degreasing.

Woman carding (untangling) wool fibres

Spinning wool on spinning wheel

**Raising the flag**  
A flying standard on the tower indicated that the lord of the castle was at home.

**Sail signals**  
To save farmers a wasted journey with their corn, the miller signalled with the sweeps. Stopping the sweeps on the diagonal (x) showed the mill was out of order. Upright sails (+) indicated open for business.

**Multure**  
Everyone had to have their corn ground at the lord's mill. The lord charged a fee, called multure, for this service. It was usually between 1/16 and 1/24 of the flour, or the equivalent in money.

**Sweeps**  
The sweeps (sails) of the windmill were angled so they turned anti-clockwise when the wind blew. "Left-handed" mills, which turned clockwise, were very unusual.



The millstones weighed about a tonne (ton)

**Throwing pots**  
The potter made round bowls, jars, and plates using a turntable. He threw the clay onto the turntable, so the process of making pots was called throwing.

The joiner made furniture and other woodwork

Castle crier called out news and proclamations

Multure

Pick-pocket

Money lender

Potter

Funeral

Weaving loom

**More candles!**  
Candles were an important source of artificial light, and the chandler (candlemaker) was kept very busy when the lord was in residence. A grand household could burn 45 kg (100 lb) of wax and tallow in a single winter's night – the equivalent of 1,300 candles.

**Carpenter's shop**  
Castle carpenters used the axe more than any other tool. With it they could rive (split) oak to produce timbers stronger than any beam cut with a saw.

Wheelwright mending a cart wheel

**Dye vat**  
To set the colour in yarns or fabrics, the dyer boiled the fabric in a huge vat, turning the cloth constantly to get an even shade.

Brewing was usually the job of women called ale-wives

**Atilliator**  
The crossbow maker, or atilliator, was the most skilled of craft workers, and was paid 50% more than other trades.



Laundry

Armourer beating a strip of metal to form a sword



# Living like a lord



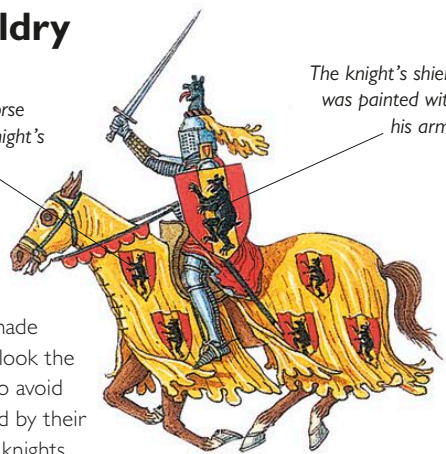
**THE LORD OF THE CASTLE** and his family lived in grand style. Their status in society depended on them spending money

and appearing to enjoy life. And spend they did – on lavish food, on richly embroidered wall-hangings, on beautiful clothes, on gold and silver plate, and on entertaining a host of friends and relations.

Their greatest luxury, though, was privacy. They had suites of rooms such as the solar, a kind of bed-sitting room attached to the great hall where they could withdraw from their servants and guests and do as they pleased. For everyone else who worked and lived in the castle privacy was impossible. All poor people lived their lives in full view of their neighbours, friends, and family. They lived in the same houses, ate together, slept together, washed together, and did almost everything else in public.

## Heraldry

Even the horse wore the knight's emblems



The knight's shield was painted with his arms

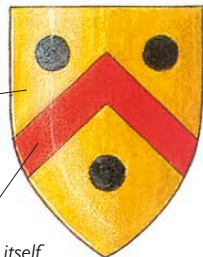
Armour made everyone look the same, so to avoid being killed by their own men, knights decorated their outfits with a distinctive pattern called arms. The patterns became very elaborate, and there were complex rules, called heraldry, for their creation.

Husband's arms



Wife's arms

The background to the arms was called the "field"



The "charge" was the symbol itself

When families married, they merged their arms by dividing the shield. When their children married, it was divided again – and so on. This was called quartering, and by the 14th century, only heralds could understand the complex system.

## Heraldic charges



pale



fess



bend



bend sinister



lion rampant



cross



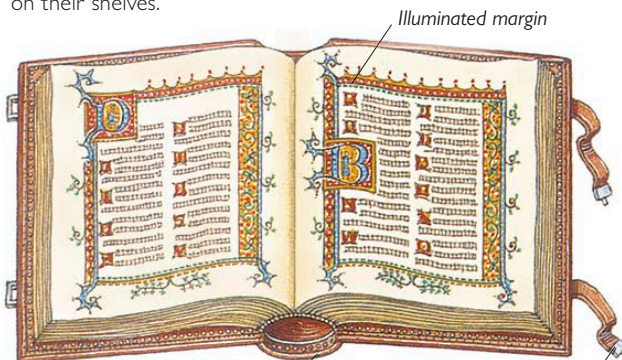
dragon



chevron

## Illuminated manuscript

Until printing became widespread in Europe in the 15th century, scribes had to copy out all books in handwriting. This made them very valuable and rare possessions: many noble households owned only a Bible, and few people had more than a dozen books on their shelves.



Illuminated margin

Bibles used in the lord's chapel had richly jewelled bindings

Clasps held the book closed, protecting the pages

The monks and scribes who copied out the text worked in a special room called a *scriptorium*. They decorated the pages with beautiful illustrations. These were called illumination because they lit up the page.

## Possessions

Even rich people had few possessions in the sense that we now understand the word. In a typical duke's 14th-century household, the most expensive items were the robes and hangings for the chapel. Together with household tapestries, these made up half the value of the duke's goods. Beds, clothes, gold, and silver made up the rest.



The lord often commissioned jewelled chalices to donate to abbeys and churches

Money and other precious items were stored in the castle itself

One of the lord's most precious personal possessions was his sword, which was specially made for him



## Dubbing

To make a young squire into a knight, the lord dubbed him. He struck a symbolic blow with the flat side of a sword or just with his hand.

## Relief!

Guards on duty on the castle wall couldn't always leave their posts.

Unblocking the gutters

## Water spout

Lead troughs carried the water through the wall, and a spout on the outside discharged it well away from the wall. Carvings of ugly faces, called gargoyles, decorated the water spouts.

Reading in the latrine

## Banking

The locked chest at the foot of the bed contained a hoard of silver plate (tableware). This wasn't just for a showy display on the dinner table: buying plate was like saving money, because the silver could be melted down and sold when times were hard.

## Gallery

In the thick wall of the tower a gallery provided access to other rooms and staircases. Musicians also played from the gallery during feasts.

## Charity

Giving alms (charitable gifts) to the poor and needy was an essential part of the medieval code of chivalry: the more a lord gave, the faster he would go to heaven when he died.



## Doctor

Physicians were respected and wealthy, but medical treatment was crude, and often did little to help the sick recover. Many doctors examined the patient's urine to determine the cause of the sickness. Cures were a combination of astrology, herbal preparations, change of diet, bloodletting, and prayer.

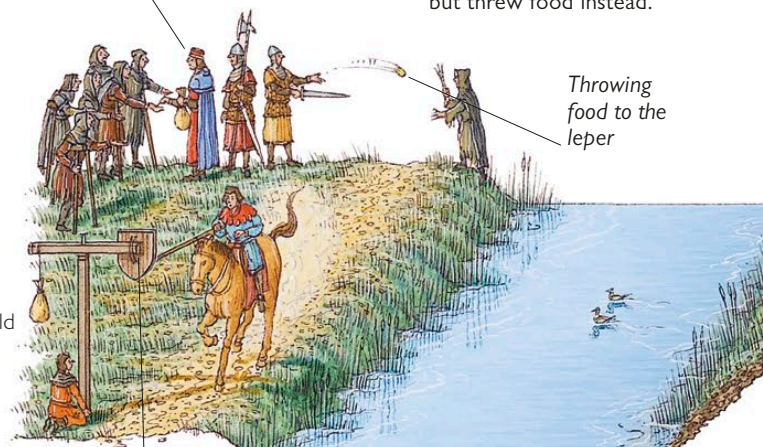
Lady of manor dictating letters

## Lord's almoner

The lord of the castle employed an almoner to distribute alms. The almoner also had the job of collecting left-over food after meals, and handing this out to beggars.

## Leper

Leprosy sufferers were outcasts even among beggars, and they carried bells or clappers to warn of their approach. Everyone was so afraid of infection that they would not touch a leper, but threw food instead.



Throwing food to the leper

## Quintain

This cunning target was good practice for the joust. Originally just a shield fixed to a post, it evolved into an elaborate, pivoted device with a counterweight that could knock the rider from his horse.

Sewage build-up in moat





### Treasury

Every castle of any size had a strong room for storing money. The lord collected taxes for the king, and he had to store this money as well as his own.

### Personal servant

The lord's servant guarded him at night, and often slept in the same room on a small bed. Sometimes, he spent the night dozing on a straw mattress outside the door.

### Sleep tight

After his horses and armour, a lord's bed was usually his most valuable possession. It was certainly the most valuable piece of furniture in the castle.



### Bloodletting

The cure for almost any disease was bloodletting. The physician just cut open a vein and let blood drain out of it. The season, the tides, the moon, and the patient's condition all affected the physician's choice of vein, and the time of the bloodletting. No matter what the physician chose, death often followed quickly.

### Pricey glass

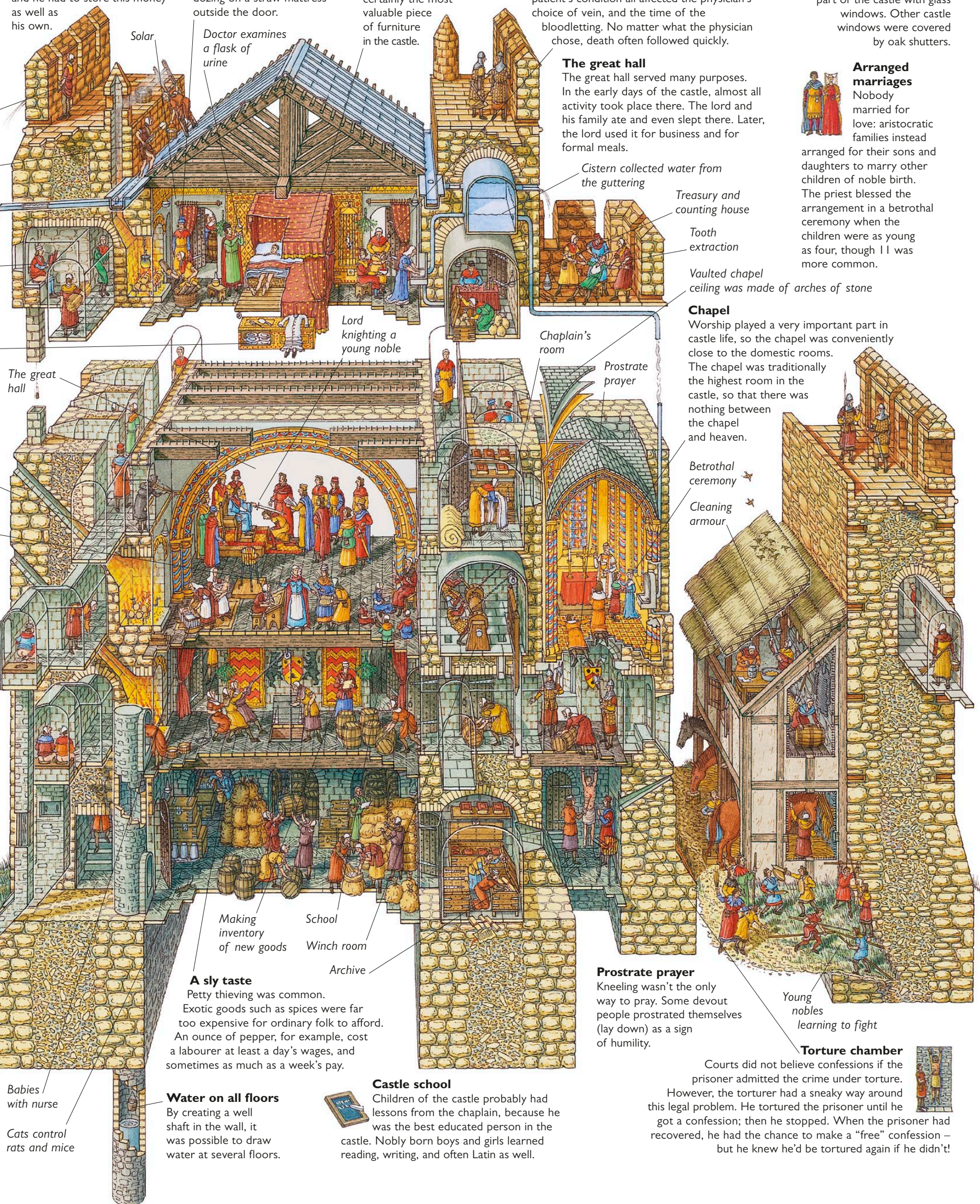
Glass of any sort was fantastically expensive, and the chapel was often the only part of the castle with glass windows. Other castle windows were covered by oak shutters.



### Arranged marriages



Nobody married for love: aristocratic families instead arranged for their sons and daughters to marry other children of noble birth. The priest blessed the arrangement in a betrothal ceremony when the children were as young as four, though 11 was more common.



Solar

Doctor examines a flask of urine

### The great hall

The great hall served many purposes. In the early days of the castle, almost all activity took place there. The lord and his family ate and even slept there. Later, the lord used it for business and for formal meals.

Cistern collected water from the guttering

Treasury and counting house

Tooth extraction

Vaulted chapel ceiling was made of arches of stone

### Chapel

Worship played a very important part in castle life, so the chapel was conveniently close to the domestic rooms. The chapel was traditionally the highest room in the castle, so that there was nothing between the chapel and heaven.

The great hall

Lord knighting a young noble

Chaplain's room

Prostrate prayer

Betrothal ceremony

Cleaning armour

Making inventory of new goods

School

Winch room

Archive

### A sly taste

Petty thieving was common. Exotic goods such as spices were far too expensive for ordinary folk to afford. An ounce of pepper, for example, cost a labourer at least a day's wages, and sometimes as much as a week's pay.

### Castle school

Children of the castle probably had lessons from the chaplain, because he was the best educated person in the castle. Nobly born boys and girls learned reading, writing, and often Latin as well.



### Prostrate prayer

Kneeling wasn't the only way to pray. Some devout people prostrated themselves (lay down) as a sign of humility.

Young nobles learning to fight

### Torture chamber

Courts did not believe confessions if the prisoner admitted the crime under torture. However, the torturer had a sneaky way around this legal problem. He tortured the prisoner until he got a confession; then he stopped. When the prisoner had recovered, he had the chance to make a "free" confession – but he knew he'd be tortured again if he didn't!



Babies with nurse

Cats control rats and mice

### Water on all floors

By creating a well shaft in the wall, it was possible to draw water at several floors.



# Food and feasting



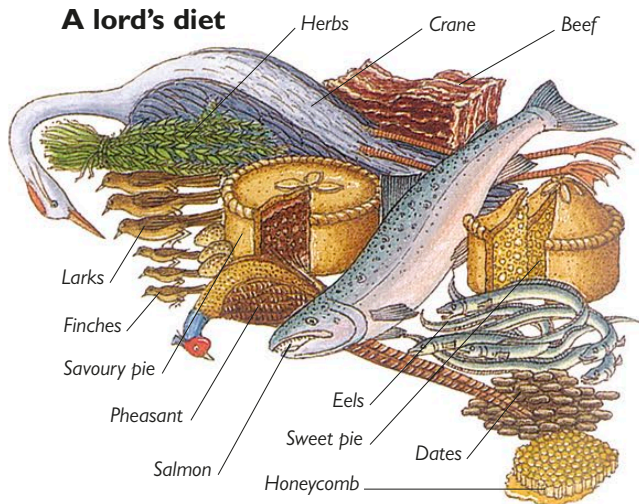
**AT FESTIVALS**, or when the lord had noble guests, it was a time for feasting in the castle. The kitchens worked day and night, and walls echoed with crackling fires and the songs of minstrels.

The menus for castle banquets seem odd today. Now, we serve different sorts of food – such as fish, meat, and dessert – in individual courses. But castle cooks mixed sweet and savoury. In a single course, roast heron and a pig’s head might share the table with pike and a sickly sweet pie made of cream, eggs, dates, and prunes.

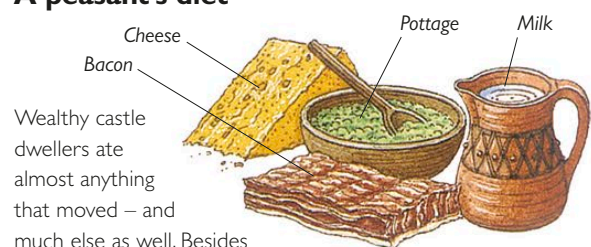
Wealthy people enjoyed spicy food, but the cook did not use spices to hide the taste of rotting ingredients. In fact, food was often very fresh. Meals were spicy because this was the fashionable way to cook. Spices were very costly, and spiced food was a sign of wealth and luxury. So too were salt and sugar.

## What’s on the menu?

### A lord’s diet



### A peasant’s diet



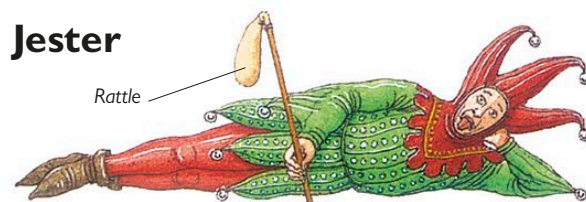
Wealthy castle dwellers ate almost anything that moved – and much else as well. Besides all manner of fish, beef, pork, and lamb, a feast might feature birds of every size, from herons and cranes down to larks, thrushes, and even finches. These made their entrance in pies, or simply roasted. In contrast, poor people had a simple and boring diet. They ate mainly bread and pottage (thick vegetable soup) with a little bacon, milk, and cheese.



## Below the salt

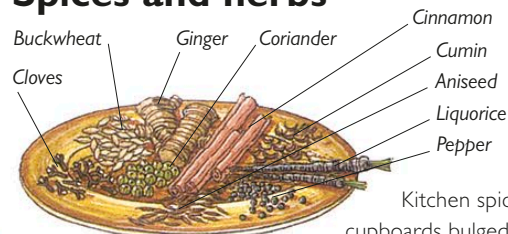
Castle cooks used no salt to season the food. Instead, lucky diners helped themselves from a boat-shaped salt cellar. This was placed in front of the lord, separating him and his family and guests from others at the table. The salt became a measure of social status, and even today, describing someone as “below the salt” means they are not respectable.

## Jester



The fool or jester was a specially privileged entertainer. Traditionally his colourful outfit made fun of fashionable clothes. Wealthy and powerful people allowed the jester to tell funny stories or sing rude songs about them. However, there was a sinister side to their laughter. Nobody took the jester seriously because often he suffered from mental illness.

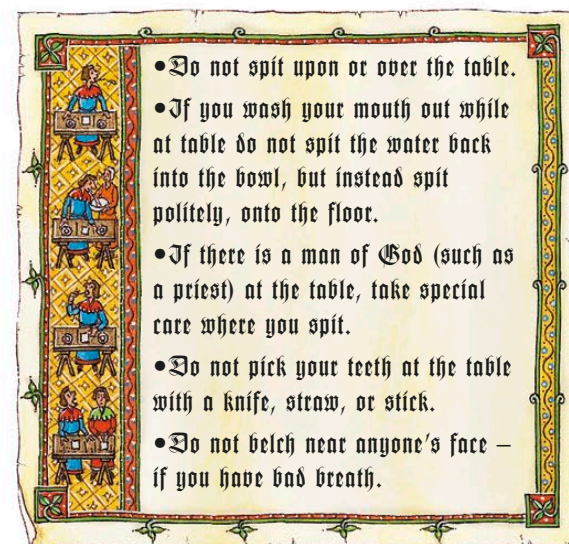
## Spices and herbs



Kitchen spice cupboards bulged with exotic flavourings. The list above includes some that we would not call spices today.

## Table manners

Books of table manners gave detailed information about how to behave at the feast. Here are a few useful tips from a 15th-century manuscript:



## Trenchermen

Food was not served on plates. Instead, everyone had a trencher – a thick slice of stale bread – or shared one. Servants placed food on the trencher. After the meal, a servant called a ewerer brought water for the lord to wash his fingers.

*Nobleman shaving by rubbing his chin with a pumice stone*

## Not so subtle

To end each course, servants brought in an elaborate dish called a subtlety. This was more like sculpture than food, and was crafted from sugar. Subtleties sometimes had religious themes, with worthy inscriptions. Often they represented natural scenes such as a hunt.

*Servants dressing nobleman*



## Musicians

In the grander castles, music might accompany the whole meal, but usually the musicians played only between courses.

*Roast peacock*

## Castle stream

The castle moats were not just a defence against mining and a source of fish – they had many other uses, too. For instance, game birds bred on artificial islands in the ponds, and reeds and rushes growing on the banks provided thatching materials.

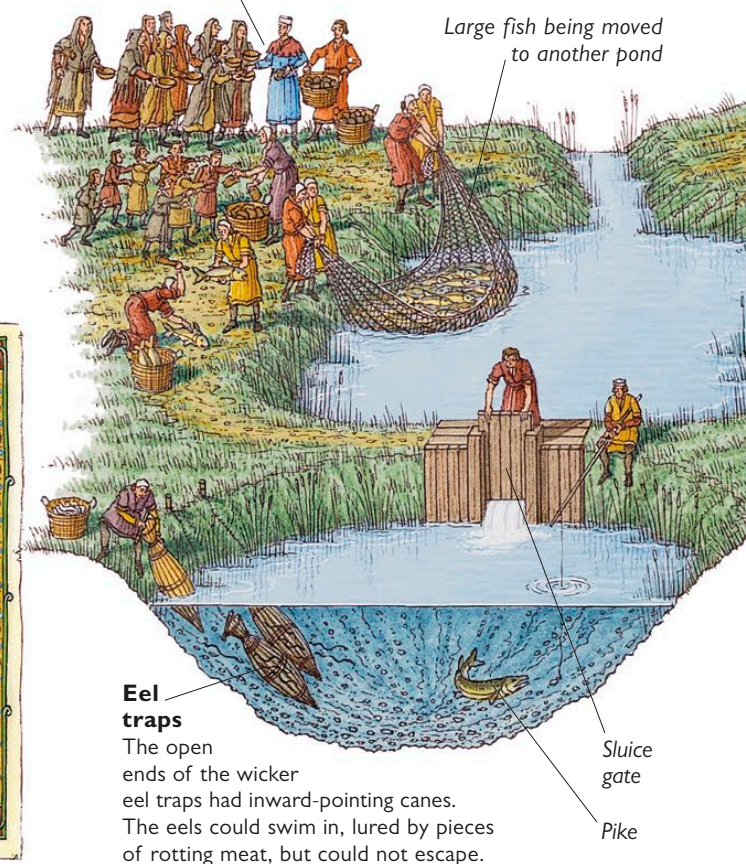
## Sluice

The supply of fish was so important that some castles had an elaborate series of ponds separated by dykes, and linked by ditches. Sluices (sliding shutters) controlled the flow of water between the different pools.

## Gon’ fishin’

Fish in the ponds were farmed, and usually the lord’s property, but the castle moat was often open to anyone with a pole and a hook. Sometimes certain villagers had fishing rights: in one manor only pregnant women were allowed to fish.

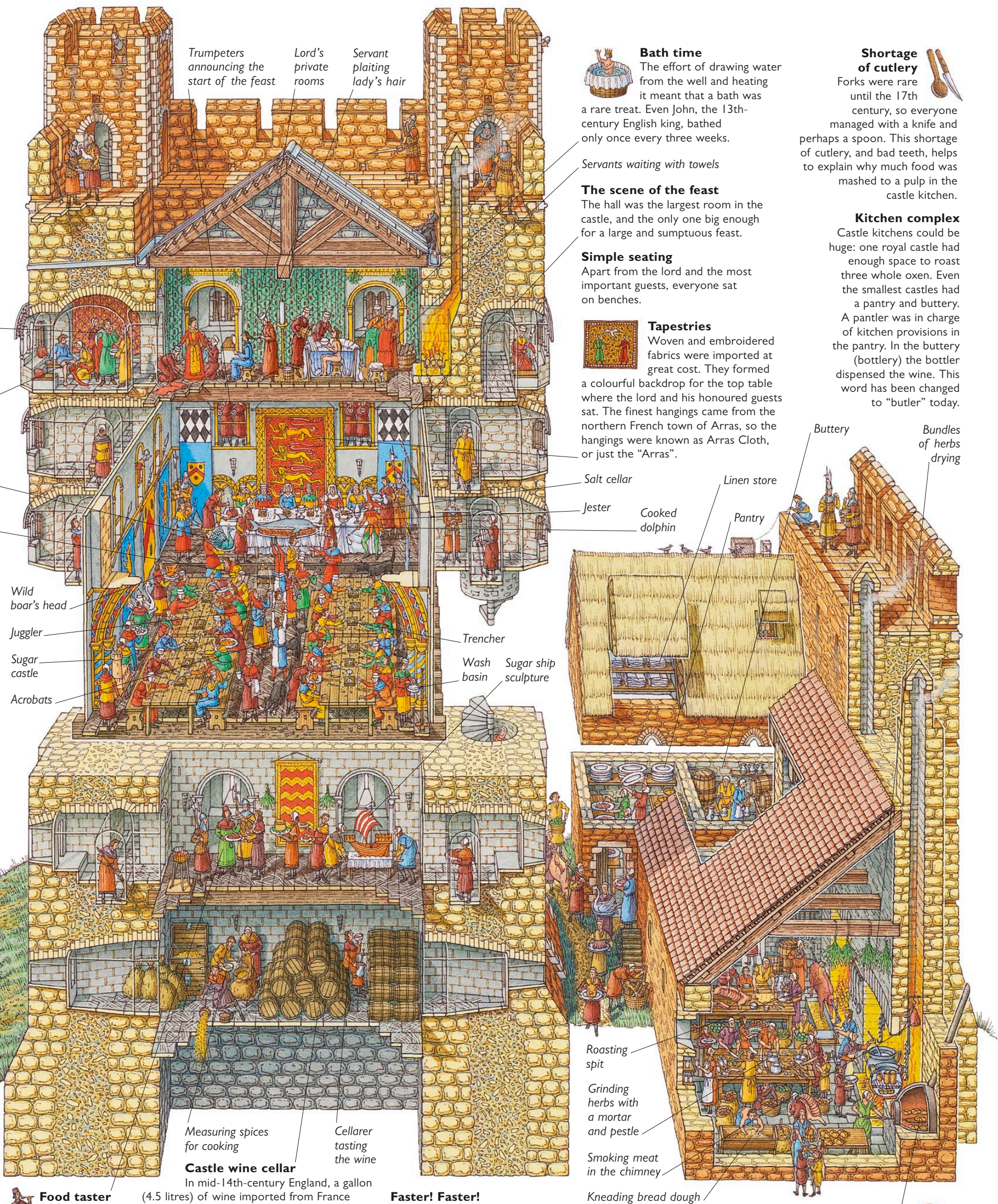
*Left-over trenchers being handed out to the poor*



## Eel traps

The open ends of the wicker eel traps had inward-pointing canes. The eels could swim in, lured by pieces of rotting meat, but could not escape.





Trumpeters  
announcing the  
start of the feast

Lord's  
private  
rooms

Servant  
plaiting  
lady's hair



#### Bath time

The effort of drawing water from the well and heating it meant that a bath was a rare treat. Even John, the 13th-century English king, bathed only once every three weeks.

Servants waiting with towels

#### The scene of the feast

The hall was the largest room in the castle, and the only one big enough for a large and sumptuous feast.

#### Simple seating

Apart from the lord and the most important guests, everyone sat on benches.



#### Tapestries

Woven and embroidered fabrics were imported at great cost. They formed a colourful backdrop for the top table where the lord and his honoured guests sat. The finest hangings came from the northern French town of Arras, so the hangings were known as Arras Cloth, or just the "Arras".

#### Shortage of cutlery

Forks were rare until the 17th century, so everyone managed with a knife and perhaps a spoon. This shortage of cutlery, and bad teeth, helps to explain why much food was mashed to a pulp in the castle kitchen.

#### Kitchen complex

Castle kitchens could be huge: one royal castle had enough space to roast three whole oxen. Even the smallest castles had a pantry and buttery. A pantler was in charge of kitchen provisions in the pantry. In the buttery (bottler) the bottler dispensed the wine. This word has been changed to "butler" today.

Wild  
boar's head

Juggler

Sugar  
castle

Acrobats

Trencher

Wash  
basin

Sugar ship  
sculpture

Salt cellar

Jester

Cooked  
dolphin

Linen store

Pantry

Buttery

Bundles  
of herbs  
drying

Measuring spices  
for cooking

Cellarer  
tasting  
the wine

#### Castle wine cellar

In mid-14th-century England, a gallon (4.5 litres) of wine imported from France cost the equivalent of a day's wages for a skilled labourer. Wine was sold in barrels holding between 120 and 240 gallons (550–1,100 litres). So although it was quite cheap by the pint, the cost of a barrel put wine out of reach of the poor.

#### Faster! Faster!

There were no mechanical aids to cooking, and spit-roasted meat required constant turning. The job of the turnspit was the lowliest in the kitchen, and in later centuries his work was done by a dog, running in a wheel, rather like a hamster's exercise wheel.

Roasting  
spit

Grinding  
herbs with  
a mortar  
and pestle

Smoking meat  
in the chimney

Kneading bread dough

#### Baker's dozen

The castle oven was a useful source of income, because manor peasants had to bake their bread there. They paid the lord in loaves for the use of the oven, and paid a fine if the reeve (village policeman) caught them baking at home.



#### Food taster

The castle taster sampled each dish for poison before people of royal or noble families ate.





# Entertainment



**CASTLE LIFE WAS SOMETIMES COLD,** often uncomfortable, but never boring. There was always some task to attend to, and when the day's work was done, the lord and his family amused themselves with sports. Two favourites were hunting and jousting.

Hunting took many forms, and some still continue today. The most noble was hawking. The hunter sent tamed birds of prey, such as kestrels, to swoop down and capture smaller birds. Hunting with dogs was popular too. The hawks, dogs, and other hunt animals were highly prized, and they lived a better life than many poor people.

A jousting tournament was the most glamorous sport, though. It was an event in which knights charged at each other on horses. Lowering long lances as they drew closer, each aimed to knock the other off.



## Let battle commence

The tournament started as mock warfare, with rival knights fighting over a wide area. The battles destroyed crops and killed warriors, and many kings tried to ban them. Gradually, though, rules evolved to make the tournament safer. By the mid-14th century it had become a formal contest featuring armoured knights charging at each other on horseback.

## Hawking

Royal and wealthy castle dwellers considered hunting with a bird of prey the finest of sports. The trained birds lived like kings: they perched on their owners' wrists, and travelled everywhere with them – even to meals and to church.



## Tournament armour

Not much is known about 14th-century tournament armour, as most existing pieces date from the 15th and 16th centuries. Early jousting helms may have been slightly thicker to withstand the impact of an opponent's lance, with a reinforcing plate below the eye slits. In addition, a long solid gauntlet (glove) called a *manifer* may have been worn.

## Hunting dogs

Hunting was an important part of castle life, and hunting dogs were treated as well or better than many humans. They lived in heated kennels, and they had a special bread – brom bread – baked for their feed.



## "It's behind you!"

Both adults and children enjoyed the puppet shows which travelling minstrels and players performed on a makeshift stage. The figures were glove puppets, and though the show resembled a Punch and Judy show, these characters did not appear until the 16th century in Italy, and later in England.

Woman doing embroidery

Women playing a harp and a psaltery

## Chivalry

Knights were all supposed to obey a code of good conduct: a set of rules for gentlemen. The code, called chivalry, demanded that the knight should be brave, truthful, godly, gentle, faithful, and fearless. Chivalry also meant behaving honourably towards women. However, the laws of chivalry only applied to noble-born Christian people. They did not protect "heathens" (non-Christians), villeins, and other peasants.



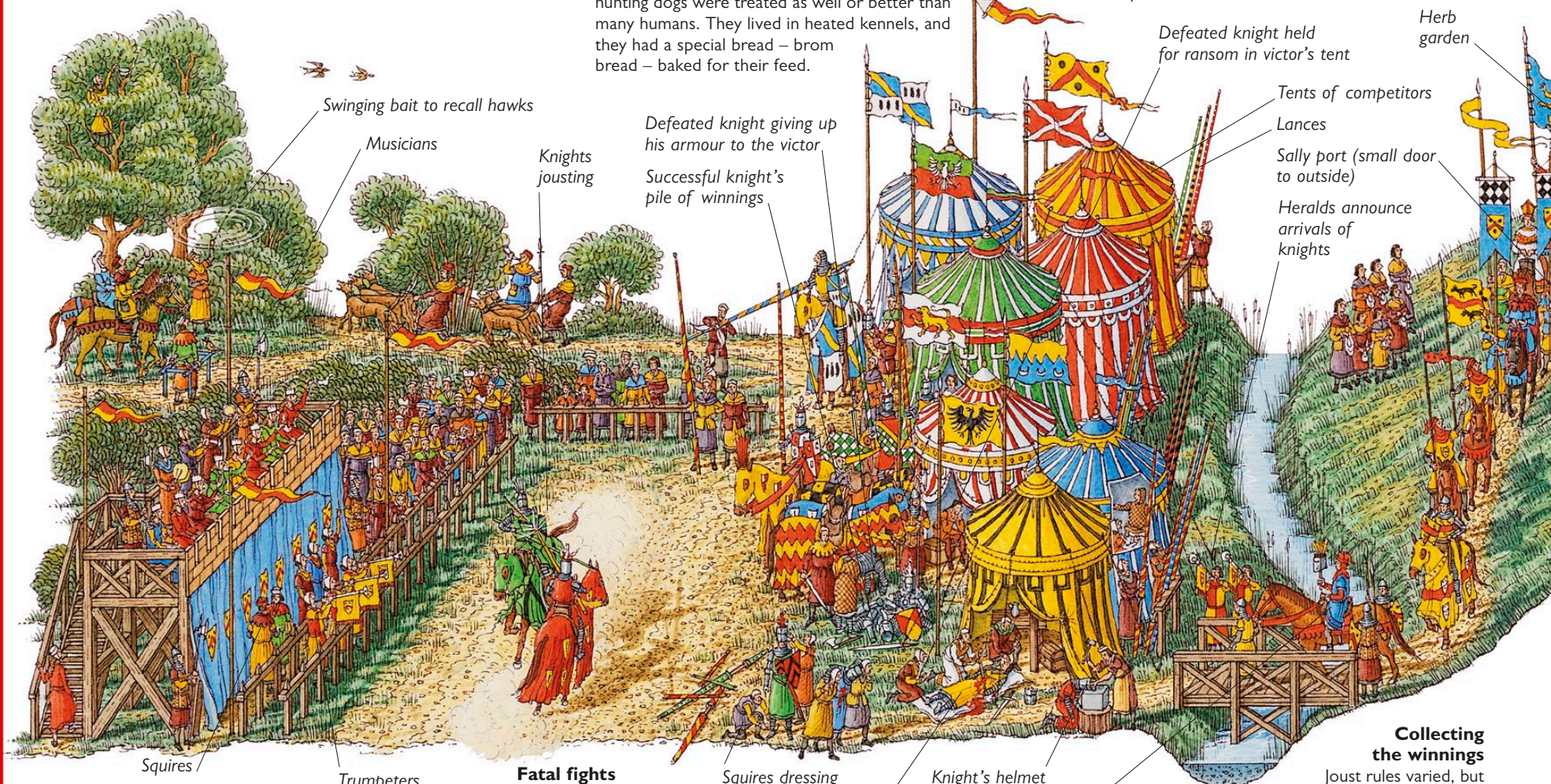
## Herald

Well-off barons and knights employed one or more heralds to help them at the joust. A herald had many duties, but the most important at the joust was to act as a representative for his master.

Ladies waving to knights

## More lances

Lances could be elaborately decorated with bright colours. The sound of splintering lances delighted the audiences, and when one heroic knight got through 300 decorated lances in a single day, he had to start on his unpainted ones.



## Drive on the right

Knights in the joust always passed to their opponent's left, so the left hand side of the suit of armour was much more heavily reinforced than the right.

Trumpeters announce start

## Fatal fights

There were deaths at most tournaments, but some were worse than others. At a French tournament held in 1240, many knights taking part suffocated from heat and dust.

Squires dressing knight for joust

Knight's helmet being removed

Squire carrying knight's helmet

## Collecting the winnings

Joust rules varied, but often the defeated knight lost his valuable armour and horse, and could even be taken prisoner and held to ransom. This meant that tournaments could be very profitable for skilled or cunning warriors.





**Lady's honour**

Each knight fought for the honour of his lady, and carried into the joust her favour. This was a token of her love, such as a sleeve or scarf, which the knight knotted round his lance.



**Alchemist at work**

Long before modern science began, alchemists experimented in primitive laboratories. They tried to turn worthless metals into gold, and to find an "elixir of life" – a medicine that cured all ills. Some of the alchemist's work was magic; some fraud; and some a genuine search for scientific knowledge that continues today.



**Women in the castle**

The castle was a male stronghold. Of course the lord's wife and daughters lived there too, with their personal servants and companions. But apart from these ladies, the only women in the household were nurses for babies and perhaps laundry-maids. Female servants were often the wives of men who worked in the castle.

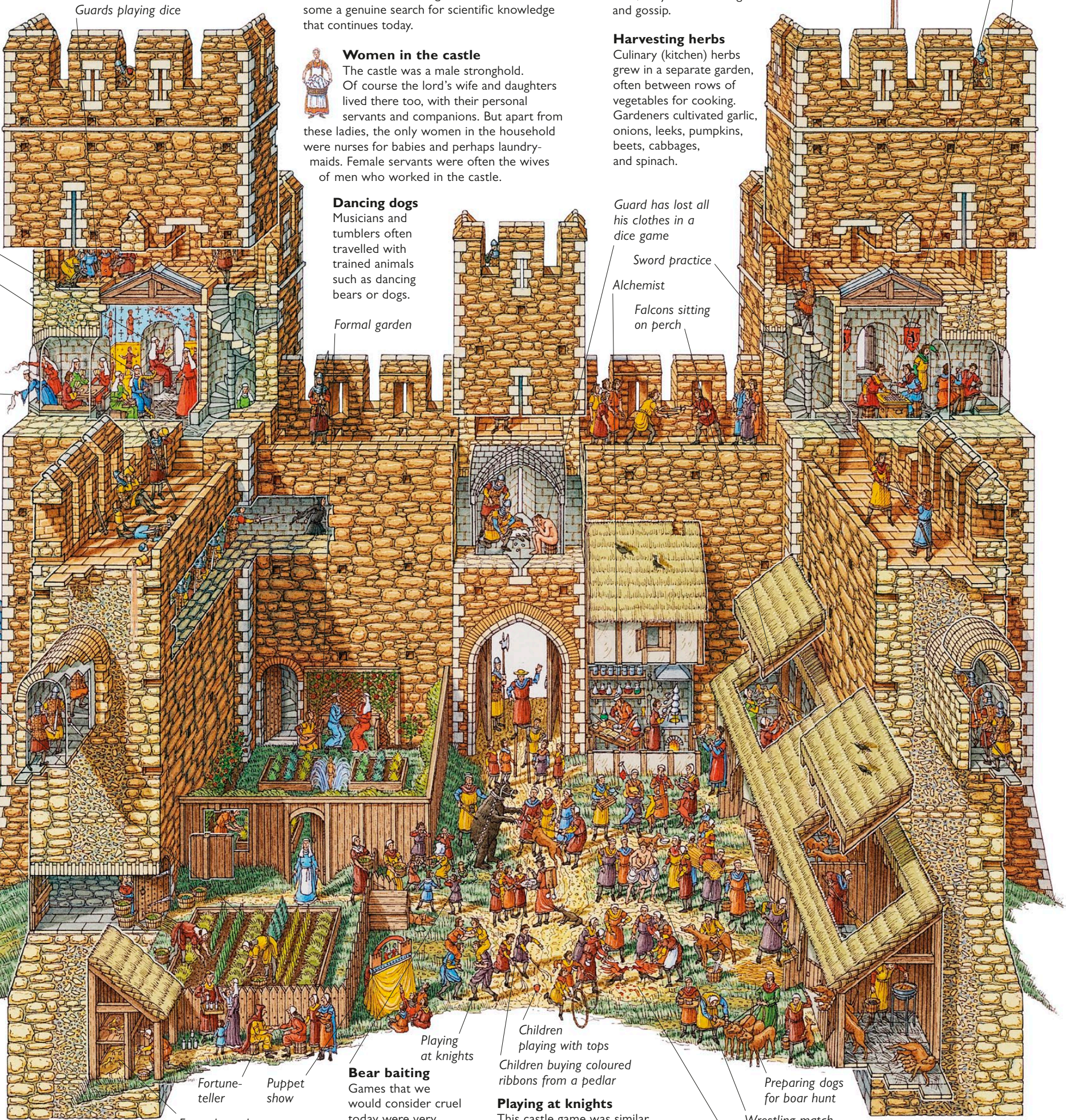


**Troubadours**

Poet-musicians performed songs about love and chivalry during or after the feast. Called "troubadours" in France, they travelled from town to town. In a world where few people could read, they were also a good source of news and gossip.

**Harvesting herbs**

Culinary (kitchen) herbs grew in a separate garden, often between rows of vegetables for cooking. Gardeners cultivated garlic, onions, leeks, pumpkins, beets, cabbages, and spinach.



**Dancing dogs**

Musicians and tumblers often travelled with trained animals such as dancing bears or dogs.

**Formal garden**

Guard has lost all his clothes in a dice game

Sword practice

Alchemist

Falcons sitting on perch

Fortune-teller  
Puppet show  
Ferret kennels



**Hide the cat**

Shops were unknown inside the castle, so people often bought small goods, like coloured ribbons, from pedlars. Some of these were finely dressed merchants, but many were poor hawkers who would catch stray cats to sell their fur if they thought nobody was watching.

**Bear baiting**

Games that we would consider cruel today were very popular. In bear baiting, people paid to watch their dogs fight a chained bear. If the bear yelped, the dog's owner won a money prize.

Children playing with tops  
Children buying coloured ribbons from a pedlar

**Playing at knights**

This castle game was similar to piggy back rides, but had a different name: "knights". The winner was the "knight" who dismounted his opponent twice in three fights; the "horses" could shove with their shoulders but could not use their hands or feet.

Preparing dogs for boar hunt  
Wrestling match

**Cock-fighting**

Cockerels are very aggressive, and will fight to the death. An organized fight between two birds was called a "main". People often bet large sums of money on which bird would win by killing the other. Cock-fighting is so cruel that it is now against the law in most countries.





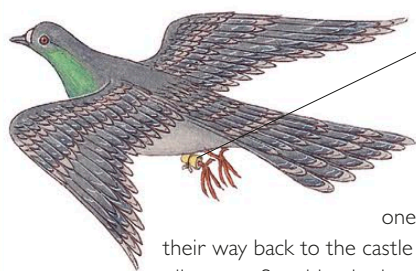
# Livestock and produce



**SUPPLYING THE CASTLE** with food was a major task. When the lord was at home there were up to two hundred hungry people to feed. Much of the food came from the manor – the land under the control of the castle and its lord. The lord of the manor owned most of the land, but he allowed his subjects – the local people – to farm some of it. In exchange, they had to cultivate the lord’s fields, called the demesne lands.

The changing seasons controlled everyone’s diet. In summer and autumn there was plenty of fresh food. However, in winter food for animals was scarce, so the villagers slaughtered many of their pigs, sheep, poultry, and cattle at the end of the autumn. To stop the meat rotting, they preserved it in salt or by smoking. Other foods, such as beans, they preserved by drying. A few foodstuffs, such as apples, grew or lasted right through to the spring.

## Carrier pigeon



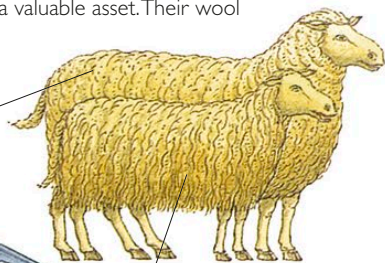
Message secured to leg

Pigeons could carry messages faster than the speediest horse. With a message tied to one leg, the birds could find

their way back to the castle from hundreds of miles away. So with a basket of pigeons a spy could send messages back to the castle about the enemy’s strengths and weaknesses.

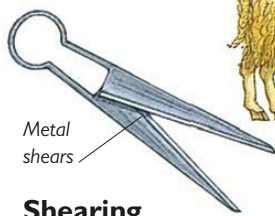
## Sheep

The sheep that grazed on and around the castle banks were a valuable asset. Their wool was sold to make cloth.



Modern breed

Medieval sheep



Metal shears

## Shearing

Weedy medieval sheep produced only a sixth of the wool of today’s sheep. Shearing (clipping) them produced matted fleeces of wool, which fetched a high price abroad. The wool trade was important to England for hundreds of years.

Peasants cut the corn with sharp sickles

The reeve tells everyone what to do

Stacking corn in stooks to dry

Loading corn on an ox-cart



## Tax demand

Most people living on the lord’s manor had to pay a bewildering array of charges, fees, and taxes. Here are a few examples:



**Wood-penny:** for the right to collect firewood on the lord’s land



**Agistment:** for the right to graze animals in the forest



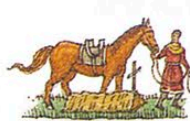
**Chimnage:** for the right to carry goods through the forest



**Bodel silver:** for the right to live in a house on the lord’s land



**Foddercorn:** grain that a villein had to provide in order to feed the lord’s horses



**Heriot:** upon death a family had to give the lord the dead man’s best animal

## Boon day

At harvest time, the lord called a “boon day”, and every able-bodied person had to help in cutting, turning, and stacking the hay. Cutting the hay and corn was very hard work, but it had its rewards: the villagers were given a large meal, and often all the ale they could drink. At the day’s end, there were amusing harvest traditions. A sheep was released into the stubble, and the villagers could keep it if it stayed in the field. If it strayed, the lord reclaimed the beast.



## Herbage

The grass that grew on the banks at the foot of the castle wall was not wasted. This pasture was called herbage, and villagers paid the lord a fee to graze their flocks there.

## Cattle

During the winter when grass grew slowly, cows had to eat hay from the stack. They had huge appetites, so most castles kept only enough cows for breeding in the spring. A few, though, kept extra cattle for milking.

## Acorn feast

Pigs cost almost nothing to keep, because they did not need feeding: they scratched for food in the forest. However, feeding hogs acorns fattened them up nicely, and roast boar was a favourite dish for the lord at Christmas.

## Tools and carts

The castle blacksmith and carpenter made every tool and implement the castle needed. The tools and carts were together called “deadstock”, to distinguish them from the animals – the livestock.



## More ale!

Ale did not keep well, so brewing went on all the time. The castle brewed some of its own ale, but also bought barrels of ale in the market. To satisfy the thirsty occupants of the largest castles, the carter hauled wagon loads of ale through the castle gates!

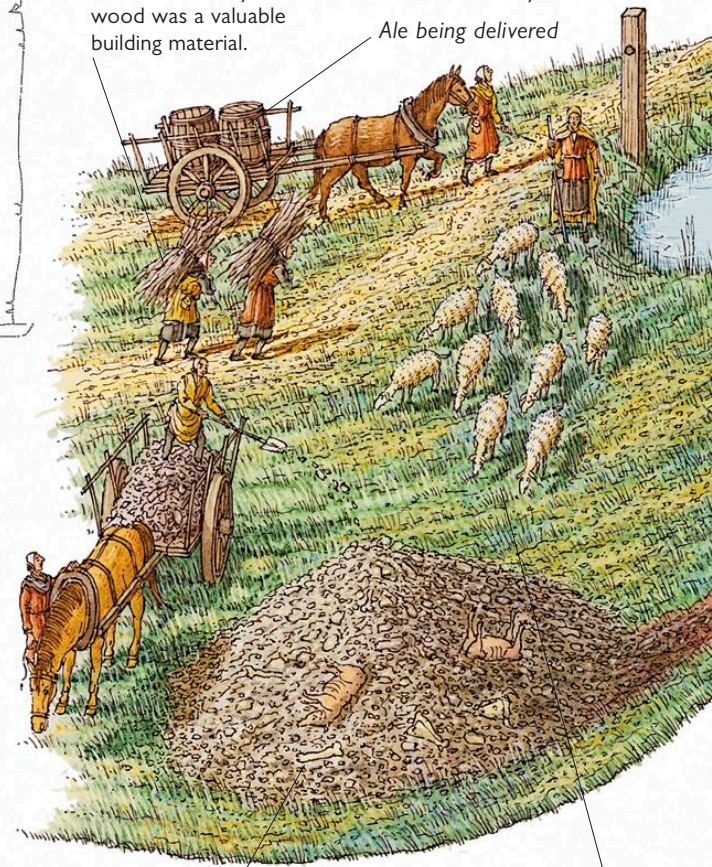
## Firewood

For cooking and heating, every castle needed fuel. Villagers and servants collected firewood, taking care to take only dead or fallen timber: healthy wood was a valuable building material.

Dumping offal (animal entrails) was illegal

Slaughterhouse

Ale being delivered



## No dumping

Disposing of rubbish was a problem in a castle. Much of the rubbish was just tipped over the walls into a stinking heap in the castle ditch. Flies attracted to the dump caused health problems when the castle was near a town.

Sheep grazing on grassy bank



**Beauty parlour**  
Everyone itched from the bites of fleas, lice, and other parasites. A fine-toothed comb helped remove them from hair, but the lice learned to hide in the seams of clothes, where they were almost impossible to get at.

**Slaughterhouse**  
A skilled castle butcher could kill a pig almost painlessly. He took great care to make sure that the beast was happy right up to the moment when he hit it on the head with a hammer. This was common sense, not kindness: if the pig was scared, its meat was much tougher.

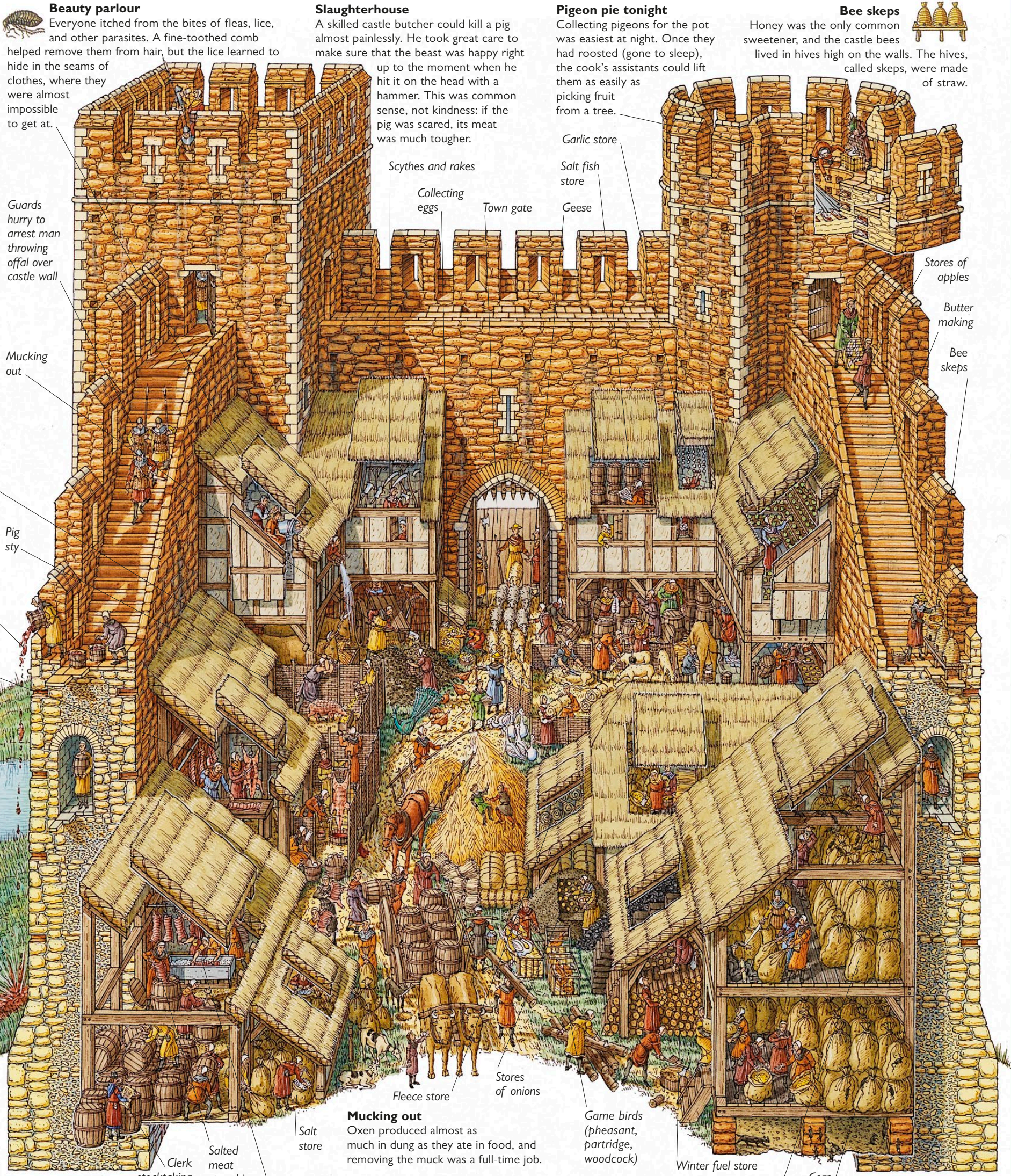
**Pigeon pie tonight**  
Collecting pigeons for the pot was easiest at night. Once they had roosted (gone to sleep), the cook's assistants could lift them as easily as picking fruit from a tree.

**Bee skeps**  
Honey was the only common sweetener, and the castle bees lived in hives high on the walls. The hives, called skeps, were made of straw.

Guards hurry to arrest man throwing offal over castle wall

Mucking out

Pig sty



Scythes and rakes

Collecting eggs

Town gate

Garlic store

Salt fish store

Geese

Stores of apples

Butter making

Bee skeps

Fleece store

Stores of onions

**Mucking out**  
Oxen produced almost as much in dung as they ate in food, and removing the muck was a full-time job.

Game birds (pheasant, partridge, woodcock)

Winter fuel store

Corn

Barley and rye

**Pricey peacock**  
The wealthiest barons kept peacocks and swans to decorate their castle grounds and to eat. A favourite banquet dish was roast peacock.

**Salting meat**  
The commonest way of preserving pork and beef through the winter was to salt it. The salt worked by locking up the water in the meat. The micro-organisms that rot meat need water to live, so salt protected the meat from spoiling.

**Fat of the land**  
Animal fat made good tallow candles, prevented armour from rusting, and greased the wooden axles of carts and wagons.

**Salt fish store**  
The castle kept a supply of salted fish, called stockfish. Fish was more popular than it is today, and was on the castle menu as often as meat.





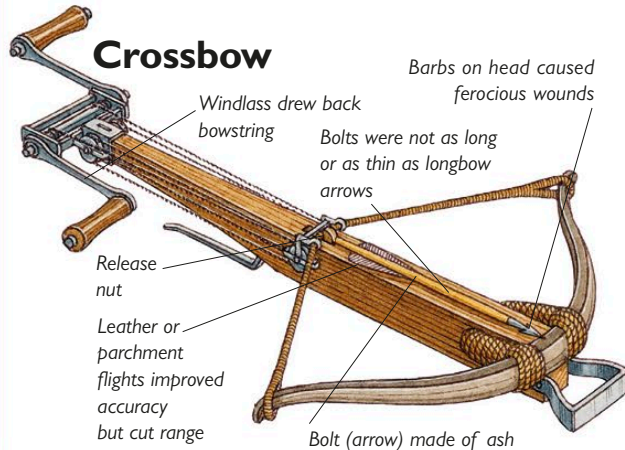
# Munitions and punishment



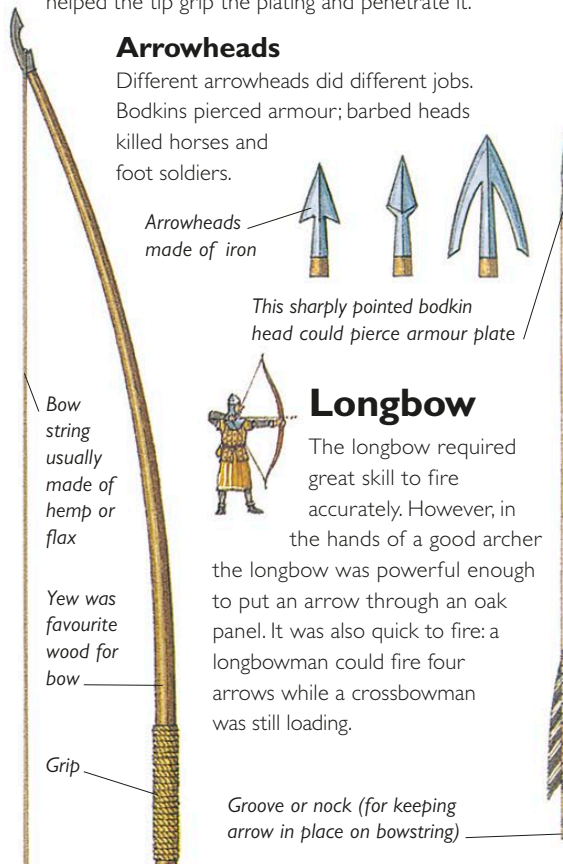
## CASTLES WHICH PROTECTED TOWNS

often had a second entrance, rather like a back door to a house. This “town gate” was a convenient way in and out of the castle. Grisly sights greeted the traders and troops who passed through the town gate. Staring down from pikes high on the walls were the rotting heads of executed traitors. Below in the ditch stood the gallows and pillory. Like the severed heads above, they reminded town folk of the severe punishments for breaking the law.

In the shadow of the town gate were the butts. These were targets where every able-bodied man had to practise his archery skills each week. There were preparations for warfare inside the castle walls, too. When they weren't rehearsing their fighting skills, the castle garrison were busy laying in stores and ammunition, or mending their weapons.

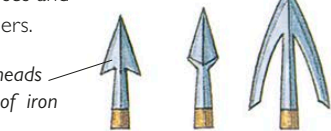


The crossbow was so powerful that it was almost a terror weapon: the medieval equivalent of the atom bomb. To help the crossbow bolt pierce armour plate, the bowman put a blob of beeswax on the tip. If the bolt struck the armour at an angle, the wax helped the tip grip the plating and penetrate it.



### Arrowheads

Different arrowheads did different jobs. Bodkins pierced armour; barbed heads killed horses and foot soldiers.



This sharply pointed bodkin head could pierce armour plate



### Longbow

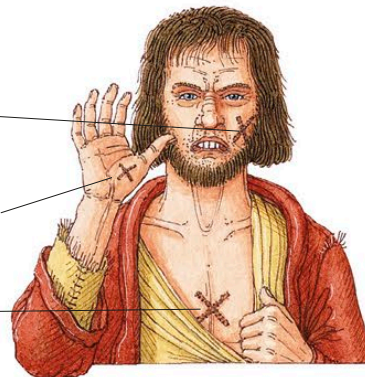
The longbow required great skill to fire accurately. However, in the hands of a good archer the longbow was powerful enough to put an arrow through an oak panel. It was also quick to fire: a longbowman could fire four arrows while a crossbowman was still loading.

## Branding

Branding on the cheek meant all could see the mark

The under side of the thumb was a common place to be branded

Branding on the chest was easier to hide

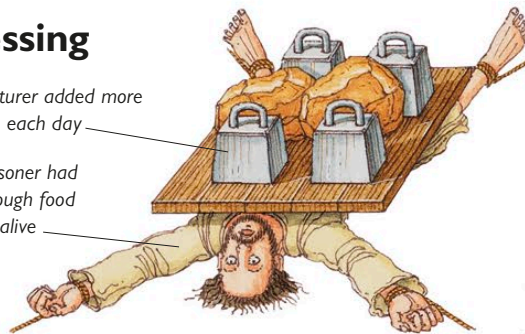


Branding – burning marks on a criminal's body – was the punishment for some offences. A criminal branded on the hand with “M” (for malefactor, or evil-doer) could not hide his guilt. The sentence was carried out immediately by an official with a hot branding iron.

## Pressing

The torturer added more weights each day

The prisoner had just enough food to stay alive



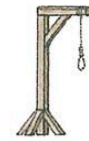
The punishment for prisoners who refused to plead (either admit or deny their guilt) was to be crushed or pressed to death. It was a slow and agonizing death, and many begged visitors to jump on the boards so that they would die more quickly.

## Finger pillory

The prisoner was trapped by his fingertips



For the most trivial offences, such as drunkenness and rowdiness, the prisoner might be confined in a finger pillory, which trapped just the fingertips. This punishment was also used for unruly schoolchildren.



### Gallows

Execution was the penalty for serious crime; only very minor offences had less severe punishments. Executions were by hanging: strangulation with a slip-knot. It was a slow death, and on the way to the gallows (the frame from which the rope hung) many victims begged their friends to hasten death by pulling on their legs.

### Pillory

The penalty for minor crimes, such as selling underweight goods, was a spell in the pillory. This was a wooden structure with holes to grip the offender's head and hands. For slightly more serious offences, such as spreading false rumours, the prisoner's ears were nailed back to the boards.

Key to turn windlass on mangonel

### Practising marksmanship

Training in archery started in boyhood, with a small bow and a nearby target. However, men had to stand more than 200 m (220 yards) from the target, and used much more powerful bows.

Windlass to pull the mangonel arm down to the firing position

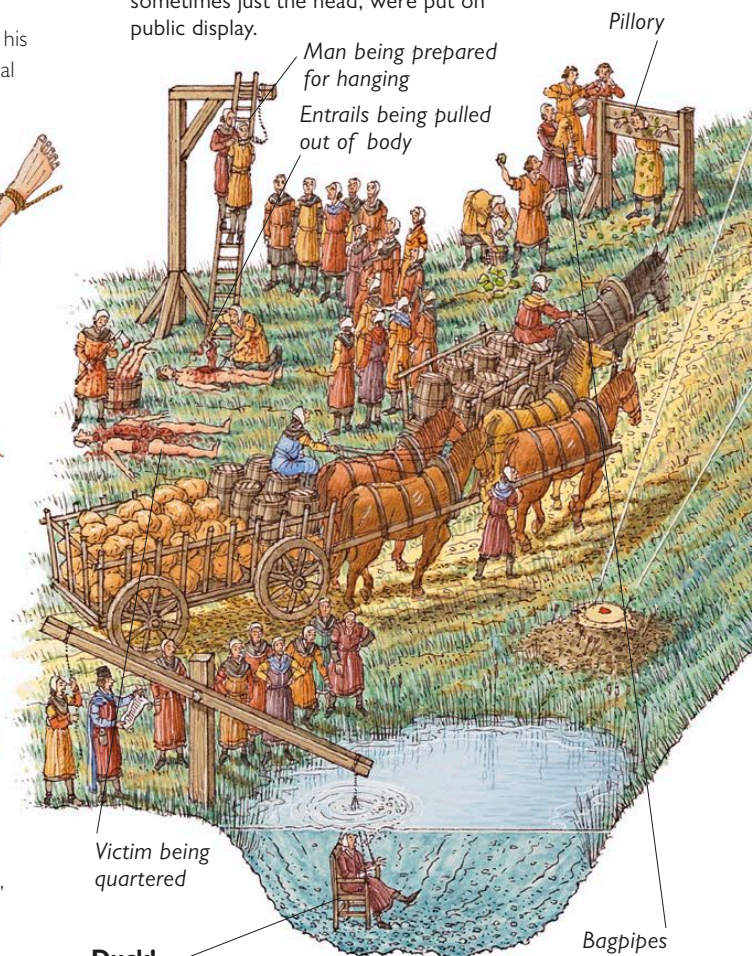
### Drawing

The penalty for treason (plotting against the king) was to be “hung, drawn, and quartered”. When the victim was half-dead, the hangman took him down, and cut out his insides. The hangman then held up the person's heart, and shouted “Behold the heart of a traitor!”

Iron-framed yett

### Quartering

The final stage of a traitor's fate was to be quartered: chopped up into four pieces. The quarters, or sometimes just the head, were put on public display.



Man being prepared for hanging  
Entrails being pulled out of body

Pillory

Victim being quartered

### Duck!

Another punishment was ducking in the moat or village pond. The offender was seated in a “ducking stool” and lowered into the water.

Bagpipes are played to humiliate the offender



**More ammunition**  
For accurate firing, the mangonel needed carefully cut stones. Weight was important, because a stone that was too light would travel beyond the target; heavier stones fell short.

### Mangonel

The only war engine which could be operated from the top of a castle tower was the mangonel. Using a trebuchet on a tower would shake it to pieces.

### Storing bows

The garrison stored their longbows carefully, unstrung in racks. The yew bowstaves were not as costly as crossbows, but they were still valuable. A good bow would cost an archer between three and six days' wages.



### Hanging in chains

For particularly unfortunate criminals, punishment didn't end on the gallows. The blacksmith riveted the corpse into "chains" – an iron framework – and the body was displayed hanging from a gibbet (beam) to deter others from doing wrong.

### Nesting box

Wind and weather quickly reduced a gibbeted body to bleached bones, and occasionally birds nested in the skull.

Heads on view to public

Putting head on a pike

### Practice arrows

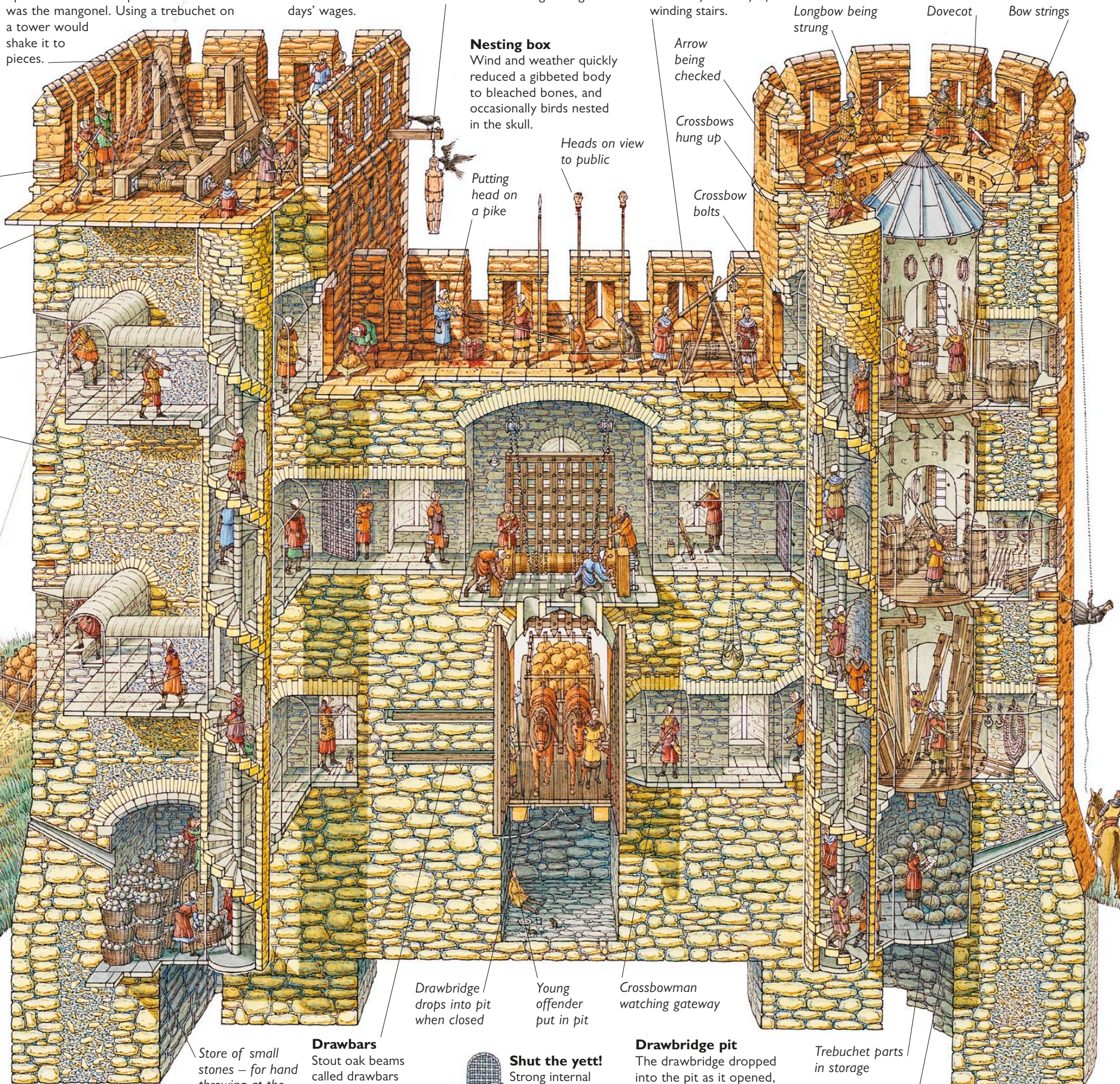
Instead of the sharp, armour-piercing points used in warfare, practice arrows had blunt tips.

### Winching up rocks

A simple windlass helped the garrison lift rocks to supply the mangonel: they were too heavy to carry up the winding stairs.

### Getting ahead

The heads of traitors decorated the castle battlements above the gates as a warning to others who plotted against the king. The heads looked out over other public places too, such as the entrances to London Bridge over the River Thames. There they were lightly boiled before a dip in preservative tar.



Drawbridge drops into pit when closed

Young offender put in pit

Crossbowman watching gateway

Store of small stones – for hand throwing at the enemy

### Drawbars

Stout oak beams called drawbars reinforced the doors when they were shut. The drawbars slid across behind the door, and when out of use they were stored in slots built into the gatehouse wall.



### Shut the yett!

Strong internal doors were made from a lattice of iron. Called "yett" in Scotland, the doors were often more like gates. In English castles, thick oak panels filled the gaps between the bars.

### Drawbridge pit

The drawbridge dropped into the pit as it opened, so the pit had to be deep. In its normal position, the drawbridge closed off the pit, which made a useful extra punishment cell. A few drawbridges were booby trapped: releasing a trapdoor pitched unwanted visitors into the pit.

Trebuchet parts in storage

Large stones for trebuchets

### Bowstrings

When they weren't fighting, archers took the strings off their bows, and kept them dry in a pouch or inside their shirts. In the castle, spare bowstrings were probably hung coiled on a dry wall.



### Spiral staircases

In most castles the stairs spiralled clockwise as they rose. This allowed a defender to retreat up the stairs while swinging his sword with his right hand. But the centre-post blocked the attacker's sword hand, so he had to lean round the corner to wield his sword.



# GLOSSARY

## Arrow loops

Narrow slit in castle walls for firing arrows.

## Ashlar

Building stone neatly trimmed to shape.

## Atilliator

Skilled castle worker who made crossbows.

## Bailey

Open area enclosed by the castle walls.

## Battlements

Jagged stonework protecting the wall-walk.

## Boon day

Compulsory work-day when manor workers helped in the lord's fields.

## Buttery

Room where wine was dispensed from barrels.

## Butts

Targets for town archery practice.

## Chivalry

Rules of polite and honourable behaviour that knights were supposed to follow.

## Constable

An officer who kept the peace; a castle policeman.

## Crenellations

Jagged protective stonework at the top of the castle wall.

## Crenels

Low sections of the battlements.

## Daub

Mud coating – much like plaster – smeared on wattle.

## Drawbridge

A bridge or roadway across a moat or pit that lifted to make crossing impossible.

## Duel

A fight to the death with formal rules to settle an argument.

## Embrasures

Arrow loops in the merlons.

## Ewerer

Worker who brought and heated water for the knight and his family to wash in.

## Forebuilding

Extension to the keep, guarding its entrance.

## Herald

Knight's assistant, representative at the joust, and expert advisor on heraldry.

## Heraldry

The rules controlling the use by noblemen of the distinctive patterns used on their flags, armour, and shields.

## Hoarding

Defensive wooden extension to the castle wall-walk.

## Hoarding holes

Holes in the castle walls to support the hoarding.

## Jousting

Knight's war game played on horseback. Armoured opponents charged at each other, each using his lance to knock the other from the saddle.

## Keep

Fortified tower containing living-quarters, at the heart of the castle.

## Lance

Long pointed pole used as a weapon in war and jousting.

## Mangonel

Siege engine, which used the power in a twisted cord to fire missiles.

## Merlons

High sections of the battlements.

## Moat

Water-filled ditch around the castle.

## Murder holes

Holes in a floor, which allowed archers to fire into the room below.

## Oubliette

Tiny cell where prisoners were left to die.

## Pillory

Punishment frame that usually gripped a victim's hands and head while onlookers threw rubbish.

## Portcullis

Sliding grid of stout wood used to guard castle entrance.

## Putlog holes

Hole in the castle wall used to support scaffolding.

## Quarrel

Arrow for a crossbow.

## Quintain

Target for jousting practice.

## Siege

The surrounding of a castle to cut off its supplies and make the occupants surrender.

## Siege engine

A machine for firing missiles at a castle, or for scaling its walls.

## Squire

Young trainee knight who served as an assistant to an older knight.

## Tournament

Knight's war-game that imitated real battles; often used to mean jousting.

## Trebuchet

Giant siege engine in the form of a boulder-firing catapult.

## Troubadour

Professional musician who usually travelled from town to town.

## Turning bridge

Drawbridge pivoted in the middle.

## Villein

Common labourer living on a knight's estate in near-slavery.

## Wall-walk

Footpath around the top of the castle walls.

## Wattle

Woven panel of twigs used in building.

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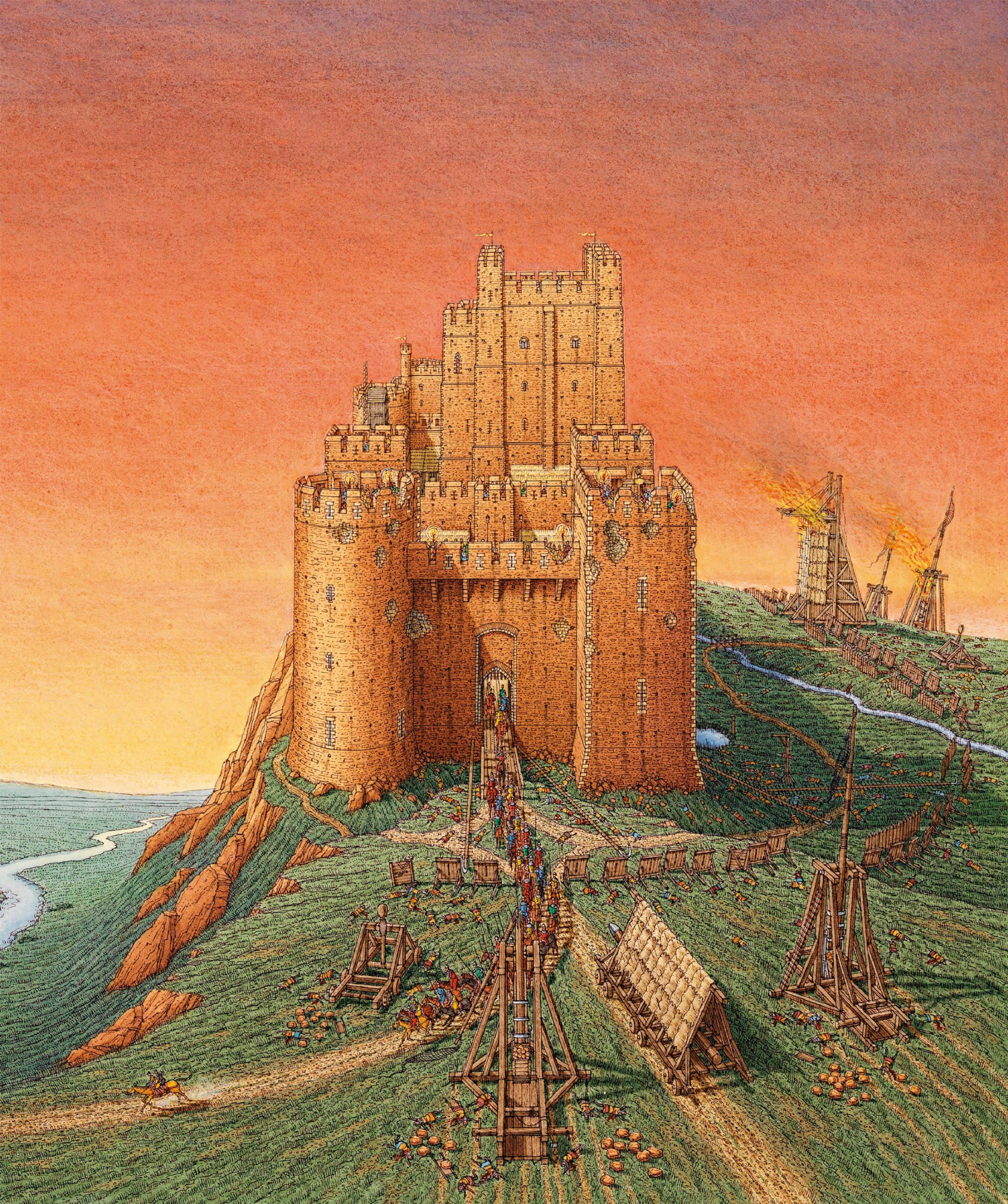
















## ESCAPED!



### **CAPTURED**

by the goodly officers of the castle sergeant, the SPY hath refused to repent his TREACHEROUS acts. In consequence of which the manor court sentenced him to

### **DEATH**

by Hanging, Drawing, and Quartering. To carry out this DUTY, the gibbet was built and the castle folk prepared to watch him DANCE THE HEMPEN JIG at first light on the morrow. But before the sentence could be carried out, the Spy

### **ESCAPED**

on a horse ridden by another vile TRAITOR. The LORD hath ordered the King's Sheriff to raise the HUE AND CRY throughout the land so that this MALEFACTOR may be brought to justice.