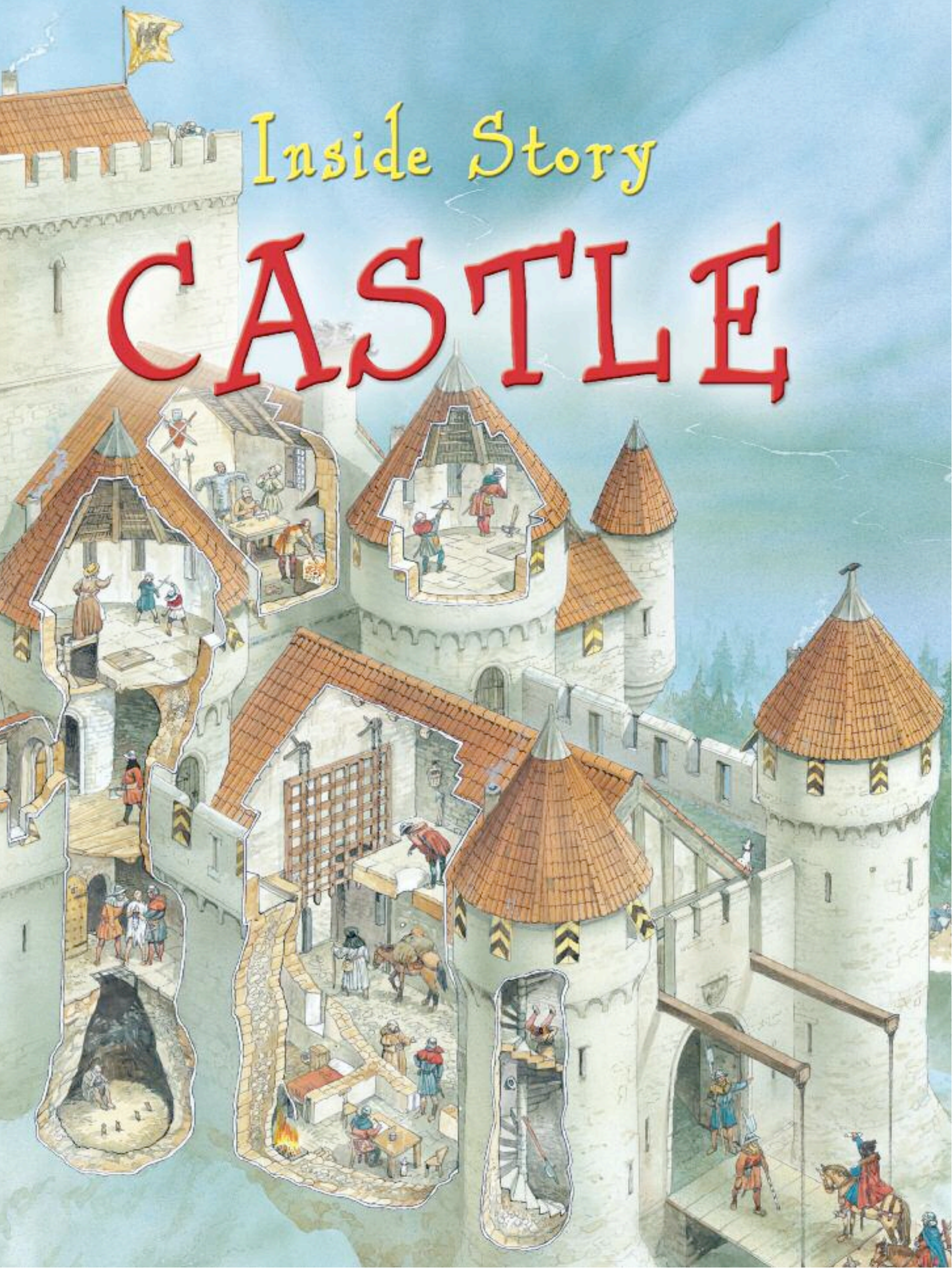


Inside Story

# CASTLE





# Inside story CASTLE



Illustrated by Peter Dennis

 Orpheus



First published in 2012 by Orpheus Books Ltd.,  
6 Church Green, Witney, Oxfordshire, OX28 4AW, England  
[www.orpheusbooks.com](http://www.orpheusbooks.com)

Copyright © 2012 Orpheus Books Ltd.

Created and produced by  
Nicholas Harris, Sarah Hartley, Katie Sexton,  
Ruth Symons and Erica Williams, Orpheus Books Ltd.

Text Julia Bruce

Consultant Philip Wilkinson

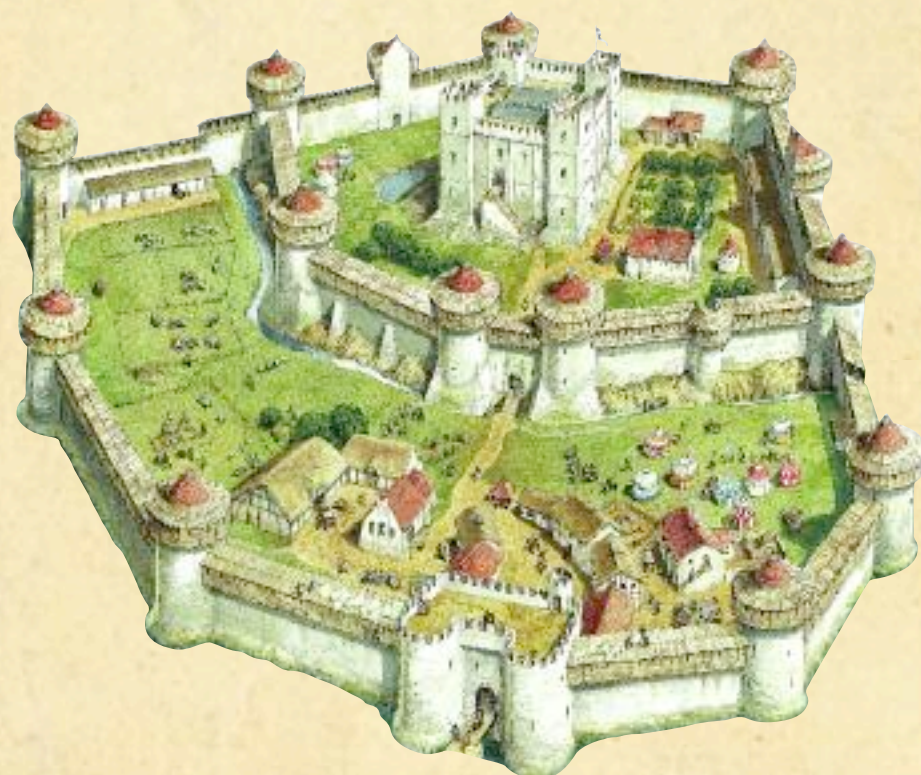
Illustrator Peter Dennis

All rights reserved. No part of this book may be reproduced, stored  
in a retrieval system, or transmitted in any form or by any means,  
electronic, mechanical, photocopying, recording or otherwise,  
without the prior written permission of the copyright owner.

ISBN 978 1 7418 3769 2

A CIP record for this book is available from the British Library.

Printed and bound in China



# Contents

- 4-5 The story of castles
- 6-7 Building the castle
- 8-9 Manpower
- 10-11 Finished castle
- 12-13 Castle life



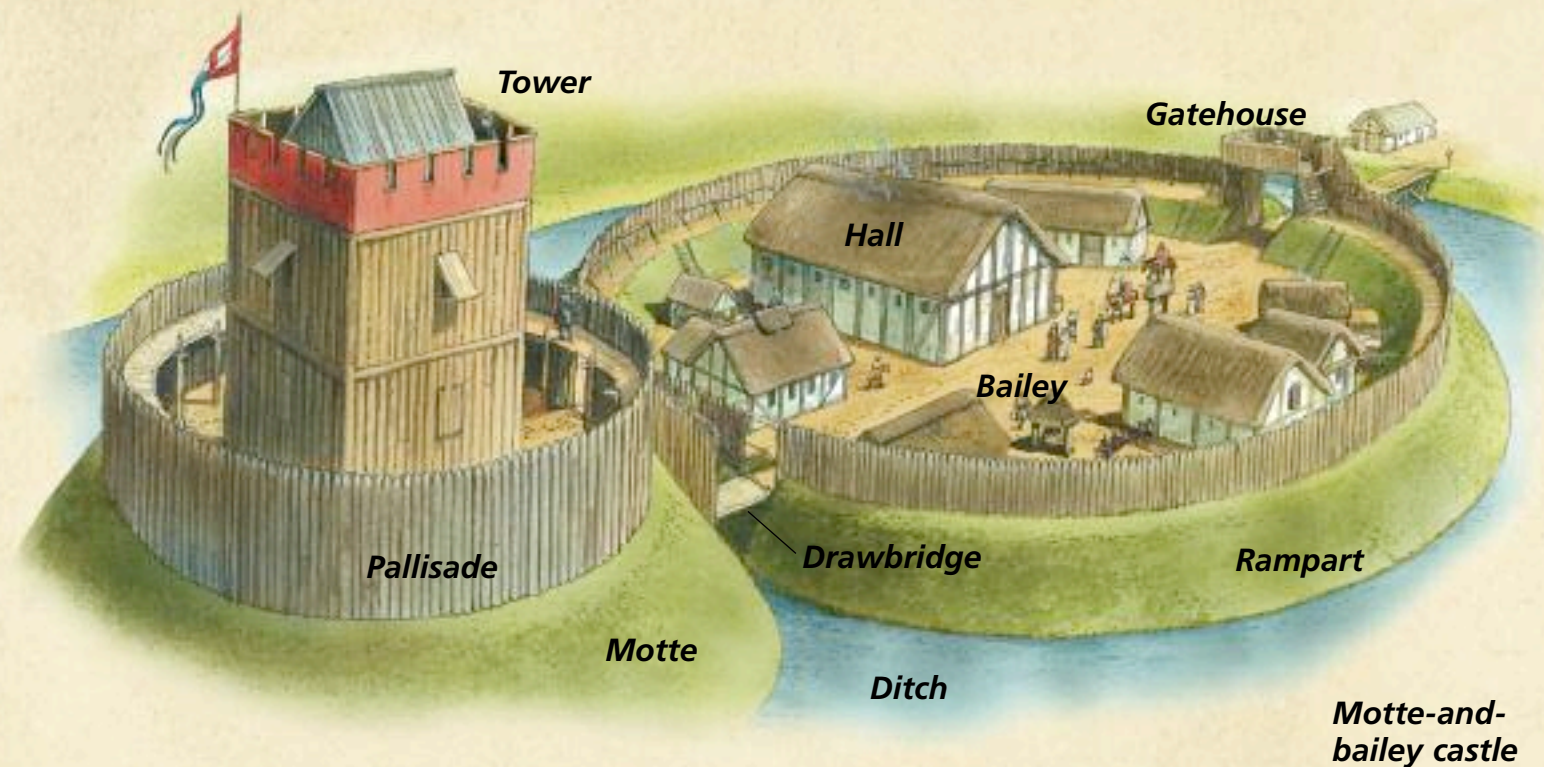
- 24-25 Defending the castle
- 26-27 The castle ruins today
- 28-29 Castle museum
- 30 Glossary
- 31 Index



- 14-15 Tournament
- 16-17 Knights
- 18-19 In the town
- 20-21 Medieval life
- 22-23 Siege!



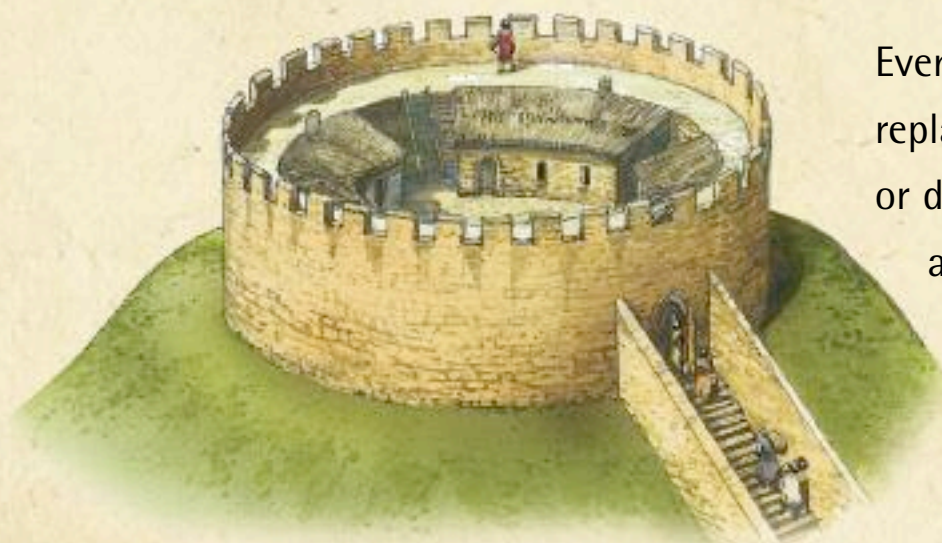




## The story of castles

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.

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.

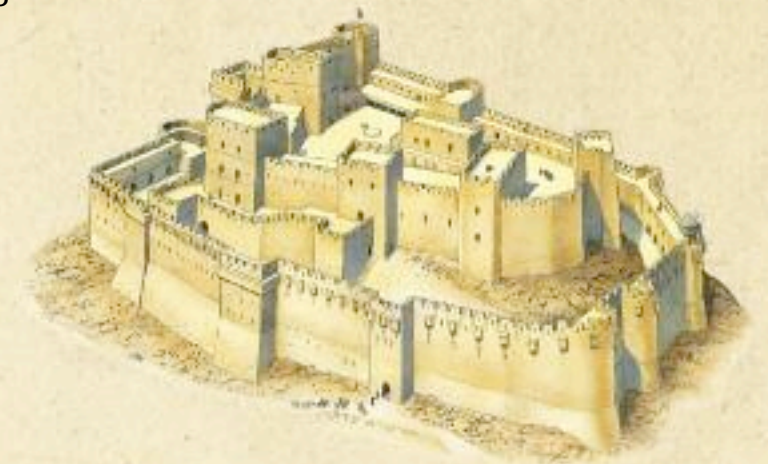


*Machicolations, stone overhangs, were first in the 1270s.*

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*



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

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.

## 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.



Block and tackle winching up building stones

Measuring

Holes to support roof beams

Fixing roof timbers

Fixing roof beams

Laying roof tiles

Rubble infill

Chapel

Master mason

Digging the well

Limewashing

Using scaffolding to reach up the walls

Filling in gaps between the stone blocks with mortar

Bringing in equipment and supplies

Quarrying building stone on-site



## 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

## 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.

## 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.





## 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

Chapel

Stained glass windows

Well

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

Chimney

Great Hall

Limewashed walls

Arrow slit

## 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

Gatehouse

Battlements

Drawbridge supports

Messenger approaches castle bearing a letter for the lord.

Drawbridge

## 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.

## 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.

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.



## 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

## 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).



## 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.

## 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.



## 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.



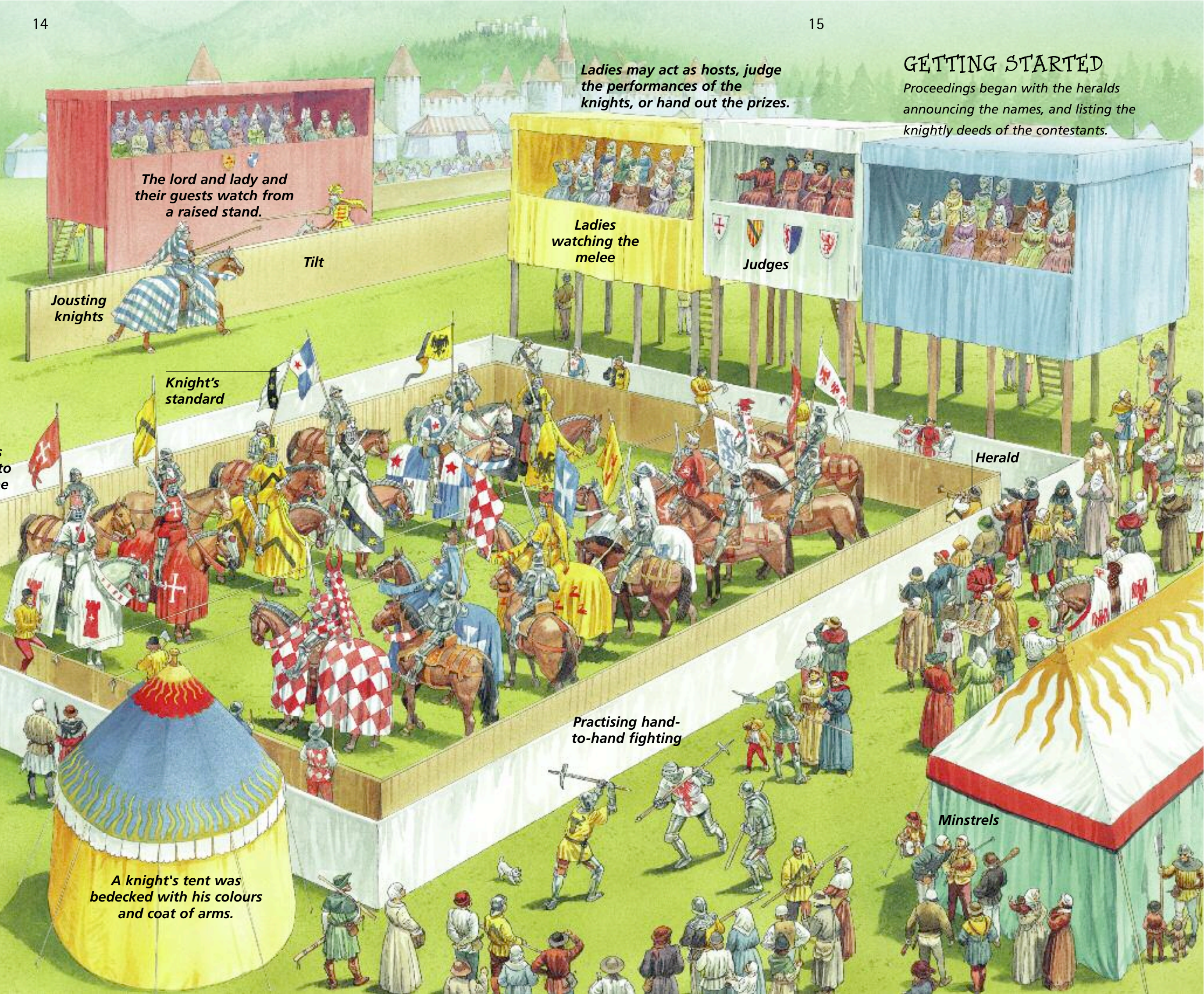


# Tournament

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.



## GETTING STARTED

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

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

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

Tilt

Ladies watching the melee

Judges

Herald

Practising hand-to-hand fighting

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

Minstrels



# 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.

They were jointed so a knight could still move easily.

1300s

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

Castle

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.

Melee

Squire

Knight putting on armour

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

**B**elow 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.





## 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.



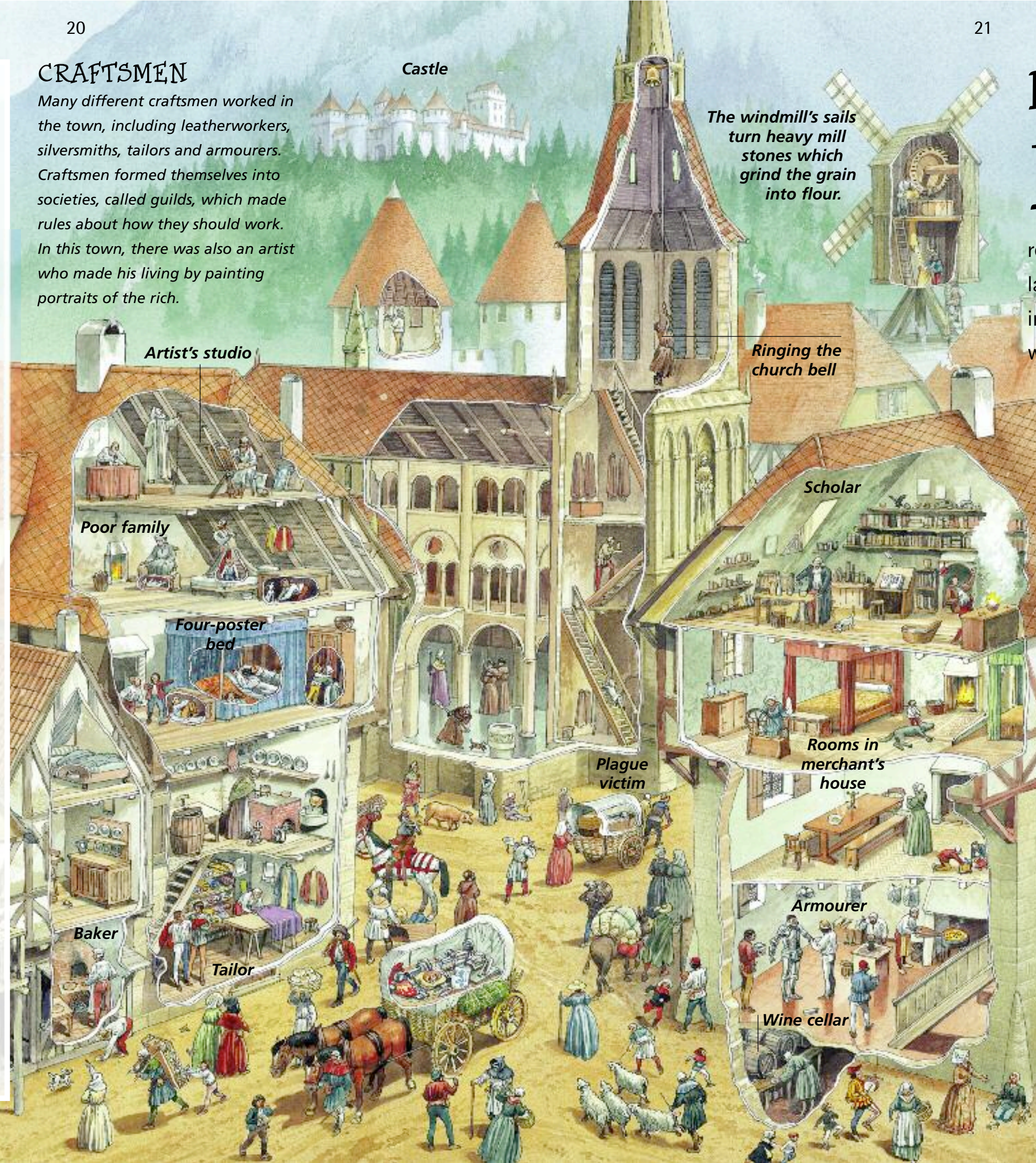
## MARKET DAY

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!

**I**t 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

Crossbowmen

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

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

Winding a crossbow ready to fire

Infilled ditch

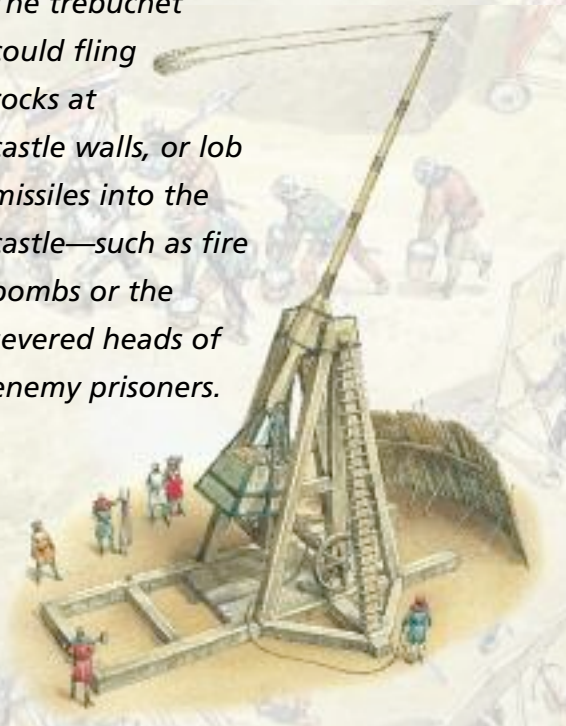
Enemy soldiers inside the siege tower

## 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.





## 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

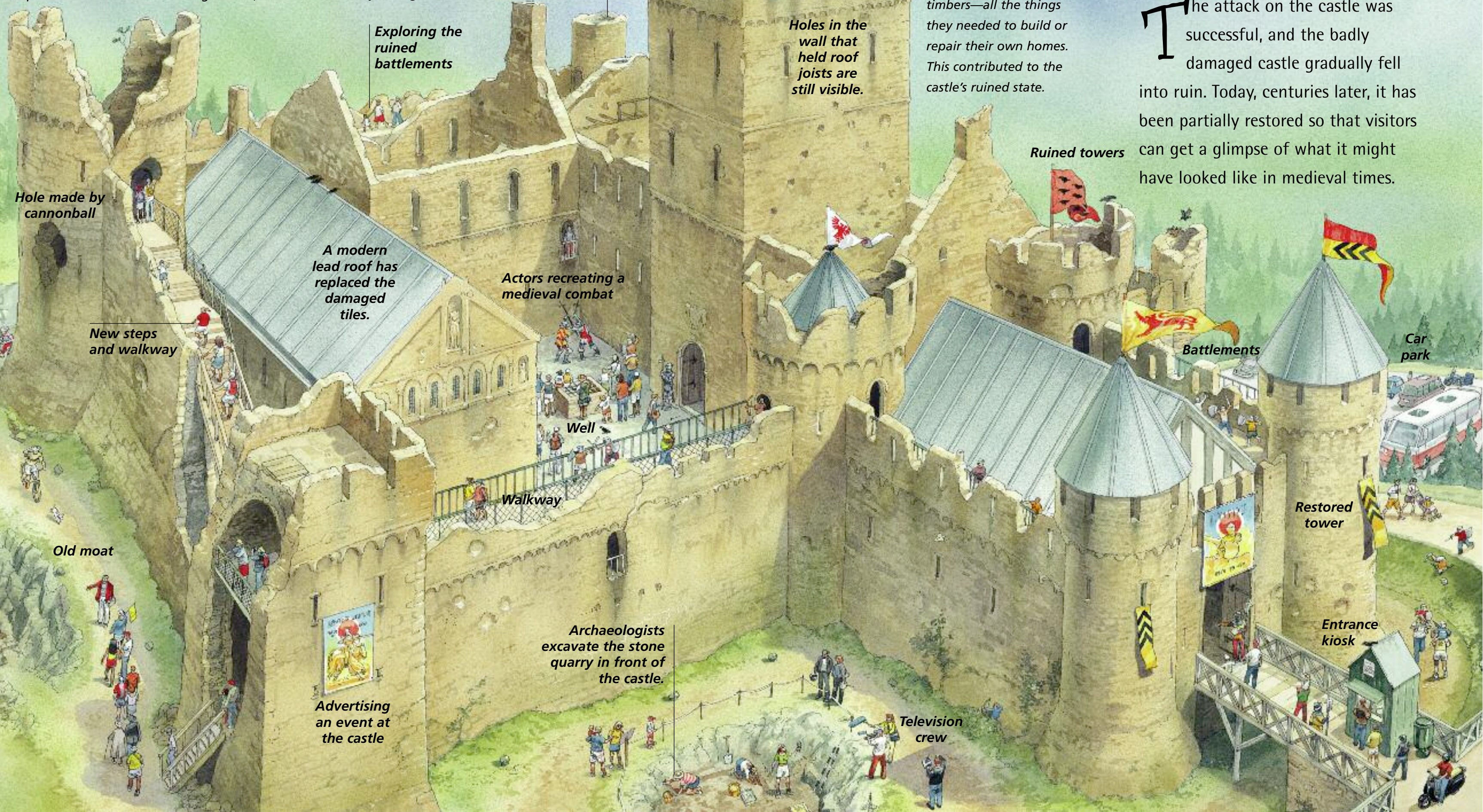
Holes in the wall that held roof joists are still visible.

## 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

New steps and walkway

A modern lead roof has replaced the damaged tiles.

Actors recreating a medieval combat

Well

Walkway

Old moat

Advertising an event at the castle

Archaeologists excavate the stone quarry in front of the castle.

Television crew

Ruined towers

Battlements

Car park

Restored tower

Entrance kiosk





## 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.

## 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.



## 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.



**AB**  
adze 9  
alchemist 12, 26  
archaeologists 26, 28  
archers 10-11, 24  
armour 12, 14, 16, 28  
armourer 12-13, 20-21  
arrows 10, 24, 28  
arrow slits 11, 30  
awl 9  
axe 8, 17  
bailey 4  
baron 13, 21  
battering ram 22, 24, 30  
battlements 9, 10-11, 24, 26-27, 30  
belfry 19  
black death see plague  
blacksmiths 9, 12

**C**  
cannons 22  
carpenters 9  
catapult 25, 30  
chain mail 13, 16  
chamberlain 13  
chapel 4-6, 8, 10, 12  
chivalry 16  
church 18, 21  
coats of arms 14, 30  
concentric castles 5  
courtyard 4  
craftsmen 12, 20  
crane 9  
crenellations 10-11, 30  
crossbows 16, 23, 24-25  
Crusades, the 5  
curtain walls 10

**DF**  
dagger 16  
drawbridge 4, 11, 22  
dubbing ceremony 17

# Index

dungeons 11, 13  
fire bombs 23, 25  
flagstones 8  
freemasons 8

**GH**  
garderobe 10, 12, 30  
garrison 25  
gatehouse 11, 22  
grooms 12  
guards 5, 10, 12-13 ,30  
guilds 20  
hall, great 4-5, 10-12, 28  
heralds 15

**JK**  
jesters 20  
joust 14, 16-17  
keep 4-5  
king 4, 10, 21  
kitchens 12-13  
knights 5, 14-17, 21, 23

**L**  
ladies-in-waiting 13  
lady 13, 14  
lance 14-17  
latrine 10, 12  
long bow 25  
lord 6-7, 10, 13, 14, 18, 23

**M**  
mace 16-17  
machicolations 10, 30  
mantlets 23, 30  
masons 6, 8-9  
melee 14-16, 30  
merlons 10  
minstrels 12, 15  
moat 12, 26, 30  
monastery 21  
monks 21  
mortar 7, 8, 11, 12

motte-and-bailey 4  
multure 18, 30  
murder hole 24-25, 30

**NOP**  
nuns 21  
nunnery 21  
oubliette 13, 29, 30  
pages 13, 17  
pantler 12  
peasants 21  
pedlars 20  
plague 20-21  
portcullis 13

**QRS**  
quarry 6-8  
quintain 17  
roughmasons 8  
saw 9  
scaffolding 6, 8  
scullions 12-13  
shields 14, 16, 23  
siege 9, 22-25  
siege tower 23, 25, 30  
soldiers 11, 16, 23  
spiral staircase 13, 24  
squires 14, 16-17  
steward 12  
swords 16-17, 24

**TW**  
tournaments 14, 17, 23, 30  
treadwheel 17, 19  
trebuchet 25, 30  
trenchermen 12  
turrets 9, 26  
wattle and daub 18  
well 6-8, 10  
winch 6, 9  
windmill 18-19, 21  
workshop 18





