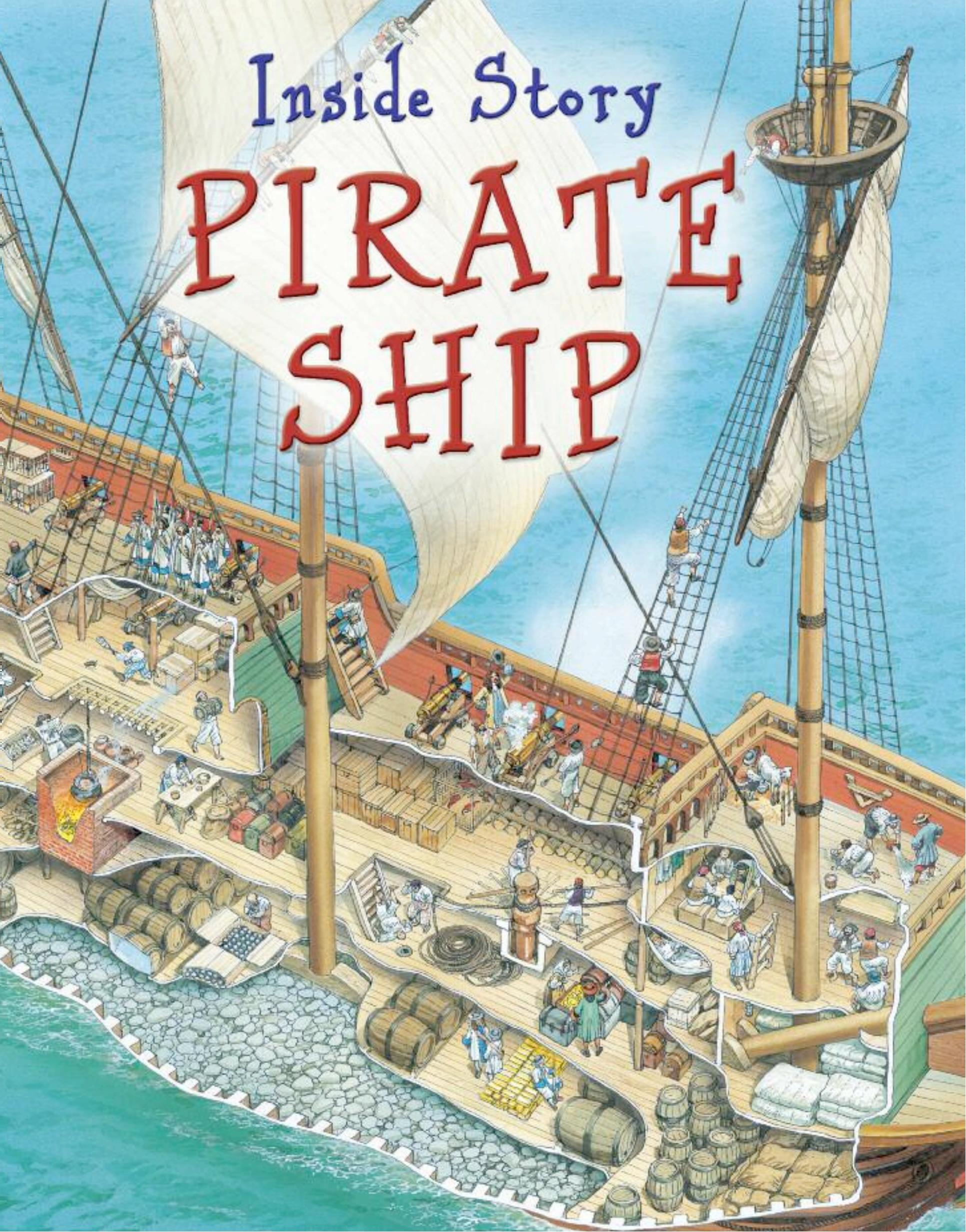
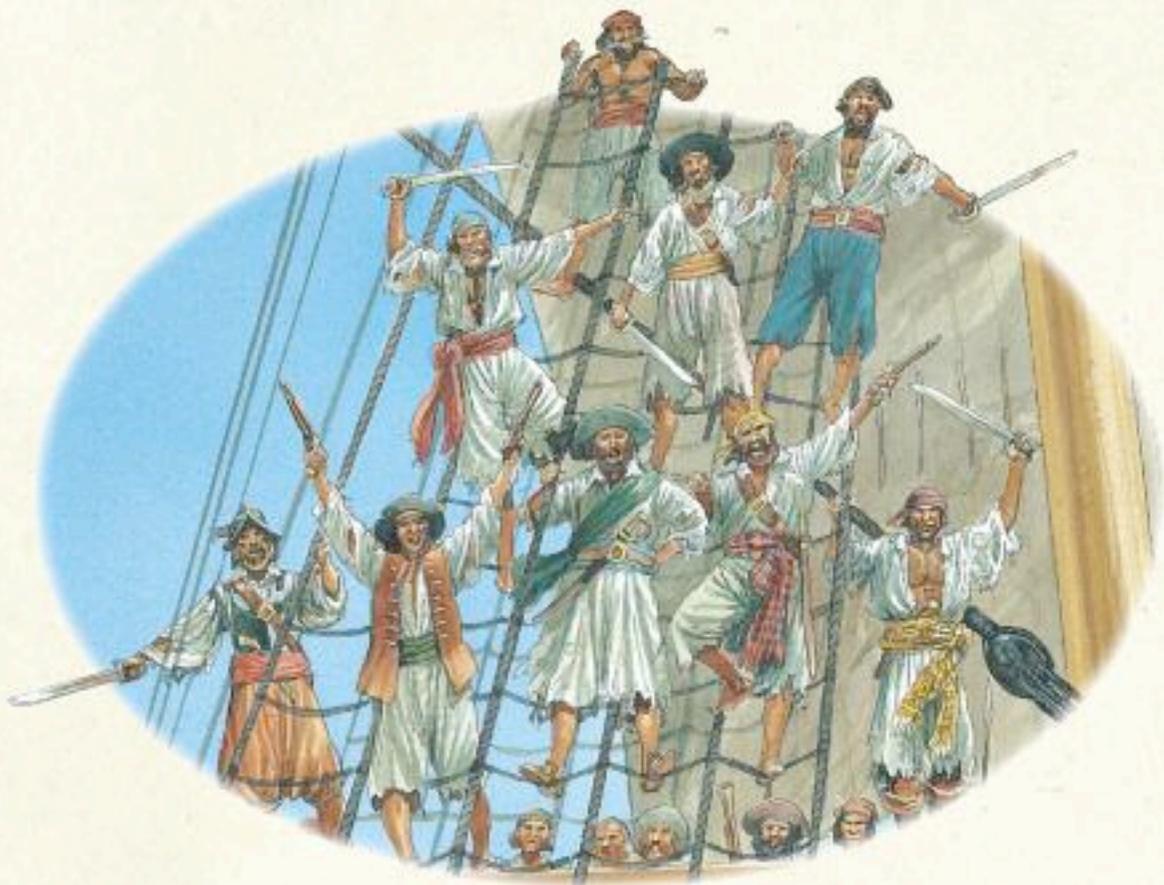


Inside Story

PIRATE SHIP



Inside story
PIRATE
SHIP



Illustrated by Peter Dennis

 Orpheus

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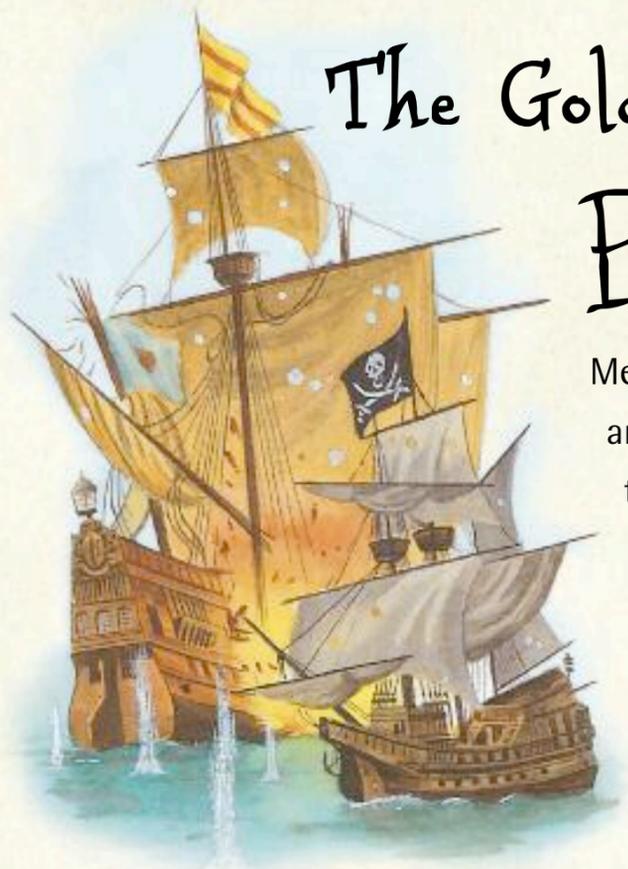
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The Golden Age of Piracy

Pirates, or sea robbers, have been around for thousands of years. Greek pirates terrorized cargo ships in the Mediterranean Sea over 4000 years ago, and piracy still goes on in some parts of the world today. But during the 16th and 18th centuries, piracy was common, particularly on the Spanish Main—the Caribbean coast of South America. This period is sometimes called the Golden Age of Piracy.

At this time, Europeans had only recently discovered South and Central America. Spanish explorers claimed a lot of these new lands, rich in gold and silver, for Spain. They sent treasure back to their home country in large, heavily armed sailing ships called galleons. Such treasure ships were irresistible to pirates. They attacked them and stole the riches they contained. Once they had been spotted and approached by a pirate ship, the crew of the treasure ship, even if they were accompanied by armed guards, had little chance of resisting the ferocious pirates.



But why were so many sailors prepared to become pirates? Life on board ship in those days was harsh. Many sailors of navy or merchant ships had been kidnapped or tricked into going to sea. A life of piracy offered them freedom and the chance to get rich, so perhaps it is not surprising that many sailors deserted or mutinied and became pirates.



This book tells the INSIDE STORY of pirates. What did pirates do between raiding ships? How were the Spanish treasure ships defended? You can look inside a pirate ship, see a pirate harbour and even explore a shipwreck under the sea.



The Jolly Roger: the pirate flag

Gunwales: the top-deck rail

THE CAPTAIN

Some pirate captains ruled their crew by fear and cruelty, but most were only in charge by agreement with their men. If they became unpopular, or

treated the crew badly, the pirates would happily remove them, and appoint someone else as their leader instead. The captain usually shared his duties with his second in command, the quartermaster.

Swivel gun

Musketoons

Cutlass

The poop deck: an open raised deck at the stern

The rear end of the ship is called the stern.

Window of the captain's Great Cabin

Preparing to fire a small cannon at the enemy

PIRATE FLAG

Different flags had different meanings. A white flag was hoisted when pirates were willing to "parley" (negotiate). A red flag symbolized bloodshed and indicated that they would give no quarter (mercy). Black flags meant death. Some captains added symbols such as the famous skull and cross-bones to their flags.

Rudder

SHIP'S GUNS

The pirate ship had several cannon. These were simple guns mounted on a wheeled carriage. This made them easy to roll back for loading with gunpowder and shot. This ship also had swivel guns mounted on the gunwales. These could be turned from side to side to aim.

The pirate crew show off their weapons.

Mainsail

Ratlines

Main mast

Rigging

The ship's stern

Welcome aboard! This pirate ship is a brigantine, a fast, medium-sized ship favoured by pirates. It was captured by its lawless crew in the Caribbean Sea. Not only are they fast, but brigantines can also sail into shallow waters where heavier warships cannot follow. The stern, or rear, of the ship, has four decks and houses the captain's quarters and some of the stores. The Jolly Roger is flown from the stern. Each pirate captain has his own flag design, but skulls and cutlasses are always popular subjects.

Sailors usually go barefoot to help prevent them slipping on wet wooden decks.

RIGGING AND RATLINES

The rigging was the ropes and chains that supported and controlled the masts, yards and sails. Ratlines were the rope ladders fixed to the rigging. Sailors used these to climb up to the sails. Men hanging from the ratlines could also attack invaders on the deck below with their guns and cutlasses.

CAPTAIN'S QUARTERS

The captain had use of the Great Cabin, the largest room on the ship. This was where he entertained guests. The Great Cabin also served both as a dining

room for the captain and his senior crew members, and as a map room, where the captain could spread out navigational charts on the large table.



NAVIGATION

Finding their way across the open ocean was no easy task for the pirates. The compass (below) was the captain's most valuable navigational tool. The magnetic needle always points north, so the captain would know the direction of travel. Time was measured by turning sand-glasses.



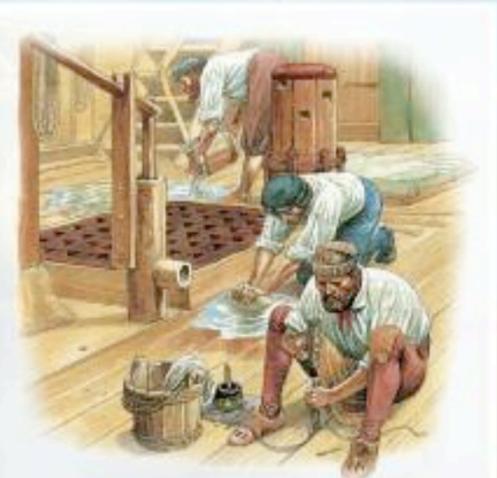
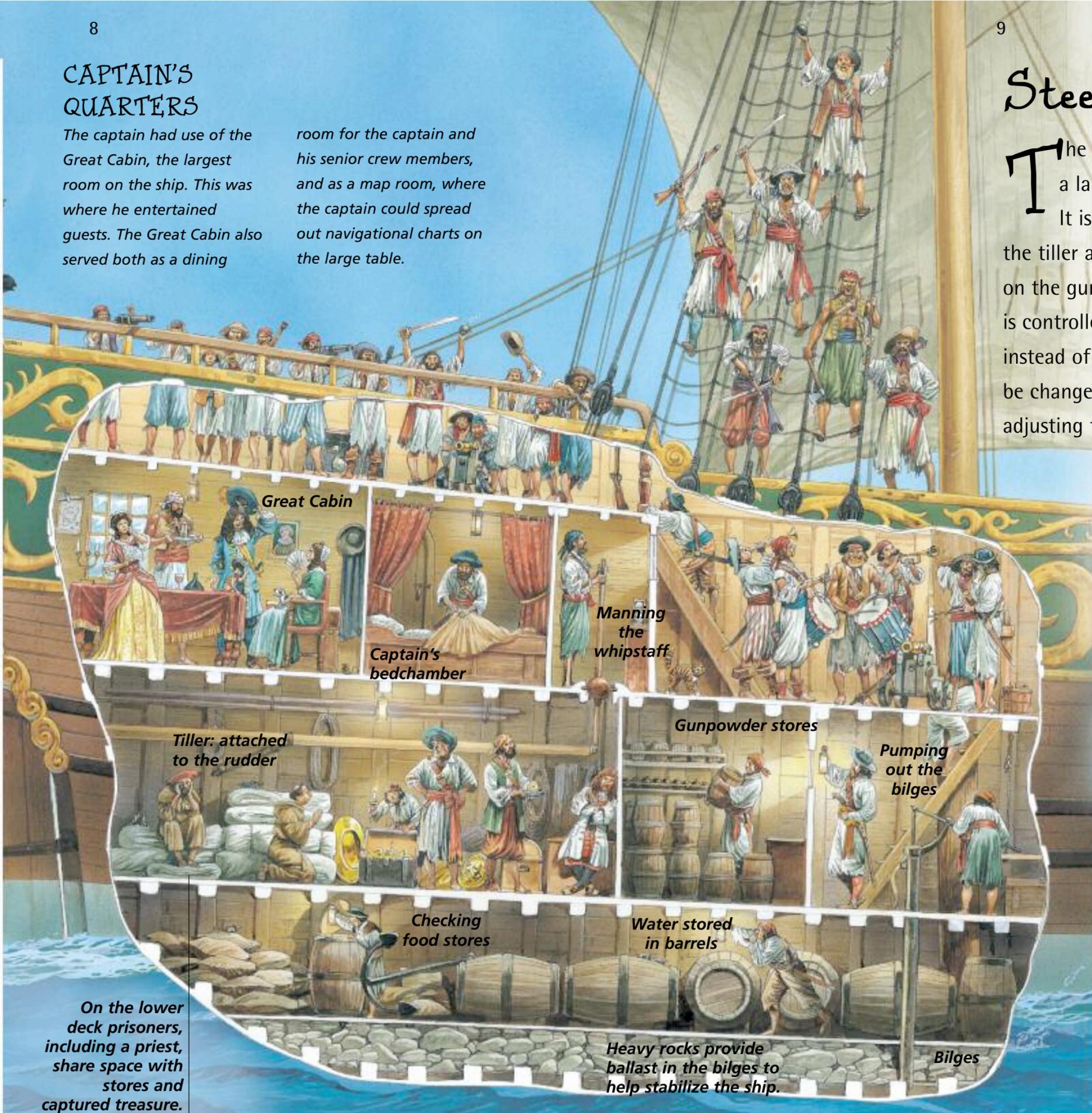
To find the ship's latitude—its distance north or south of the Equator—sailors used a cross-staff (top) to measure the height of the sun. The higher the sun at noon, the closer they were to the Equator. At night, a sailor could use an astrolabe (below) to work out latitude by measuring the angle between the Pole Star, his eye and the horizon.



On the lower deck prisoners, including a priest, share space with stores and captured treasure.

Steering the ship

The ship is steered by the rudder, a large wooden paddle at the stern. It is controlled by wooden rods, called the tiller and whipstaff, by the helmsman on the gun deck. On some ships, the rudder is controlled by a wheel on the main deck instead of a whipstaff. The ship's course can be changed by both moving the rudder and adjusting the position of the sails.



KEEPING SHIPSHAPE

When pirates were not fighting, there were plenty of chores to keep them busy. Sandstone blocks were used to scrub clean the upper decks (above). Gaps between planks had to be sealed regularly to stop water seeping through to the lower decks. To do this, a piece of iron was used to drive tar-soaked rope between the planks. This task was known as caulking.

The ship's bow

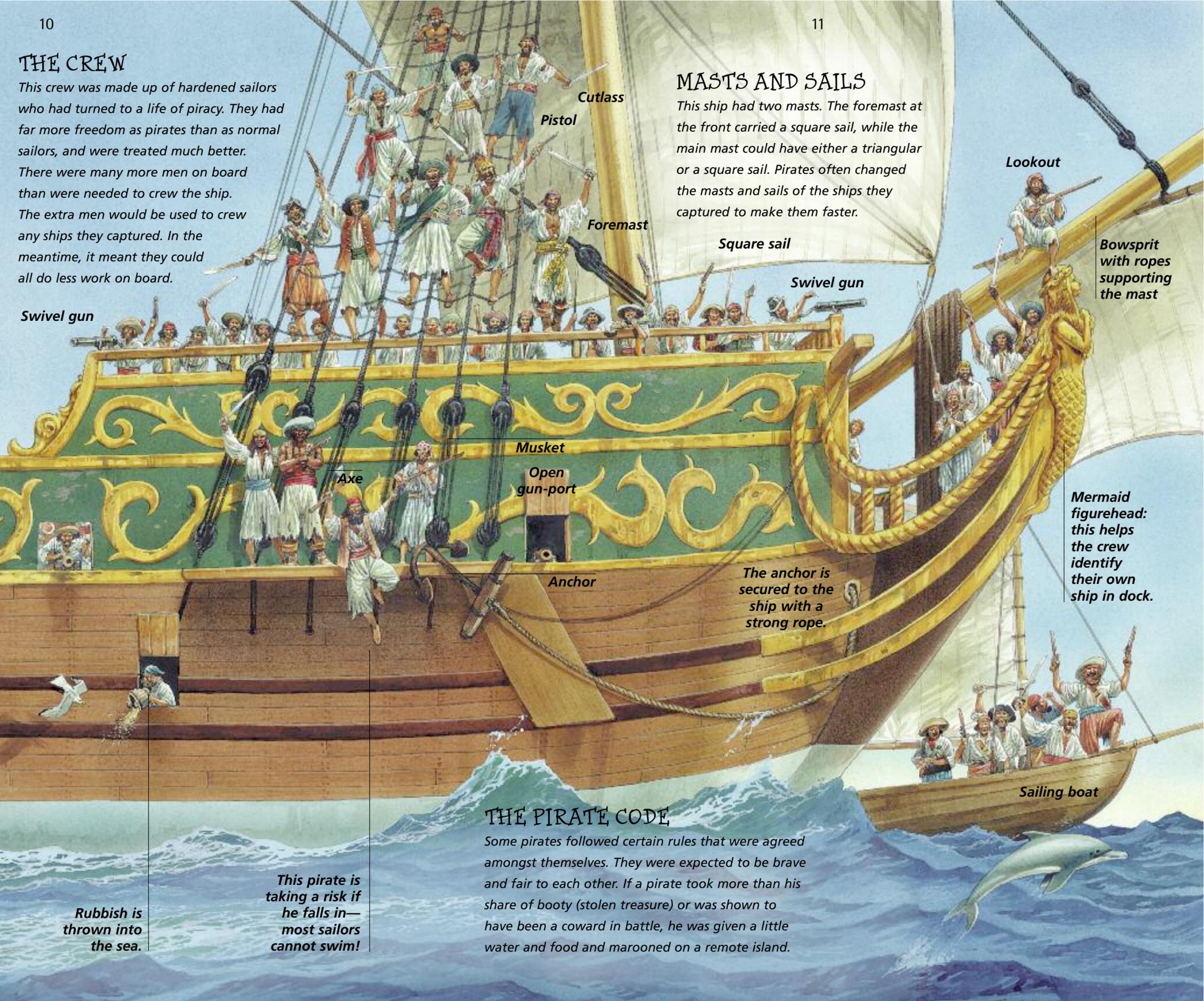
Here at the bow is the fo'c'sle (short for forecastle), or front deck.

This is often higher than the rest of the top deck to give a good view. Most of the crew have their sleeping quarters here at the front of the ship. Below deck is the ship's kitchen, or galley, reached from above by stairs called a companionway.

THE CREW

This crew was made up of hardened sailors who had turned to a life of piracy. They had far more freedom as pirates than as normal sailors, and were treated much better. There were many more men on board than were needed to crew the ship. The extra men would be used to crew any ships they captured. In the meantime, it meant they could all do less work on board.

Swivel gun



MASTS AND SAILS

This ship had two masts. The foremast at the front carried a square sail, while the main mast could have either a triangular or a square sail. Pirates often changed the masts and sails of the ships they captured to make them faster.

Cutlass

Pistol

Foremast

Square sail

Swivel gun

Lookout

Bowsprit with ropes supporting the mast

Musket

Open gun-port

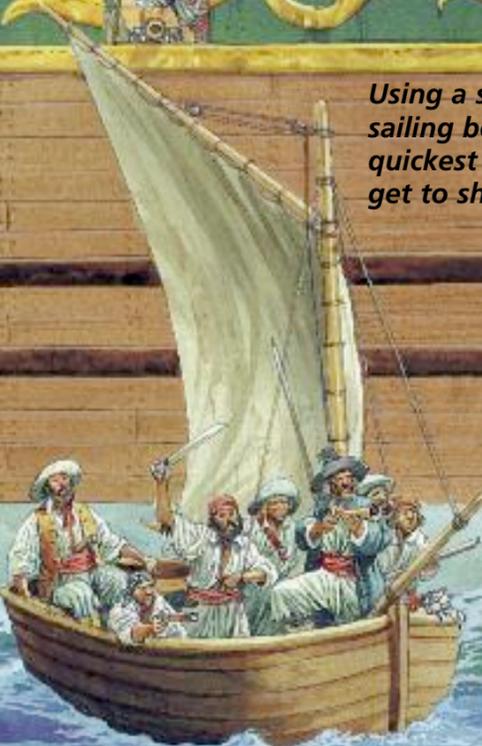
Axe

Anchor

The anchor is secured to the ship with a strong rope.

Mermaid figurehead: this helps the crew identify their own ship in dock.

Using a small sailing boat is the quickest way to get to shore.



Rubbish is thrown into the sea.

This pirate is taking a risk if he falls in—most sailors cannot swim!

THE PIRATE CODE

Some pirates followed certain rules that were agreed amongst themselves. They were expected to be brave and fair to each other. If a pirate took more than his share of booty (stolen treasure) or was shown to have been a coward in battle, he was given a little water and food and marooned on a remote island.

Sailing boat



DISEASE AND INJURY

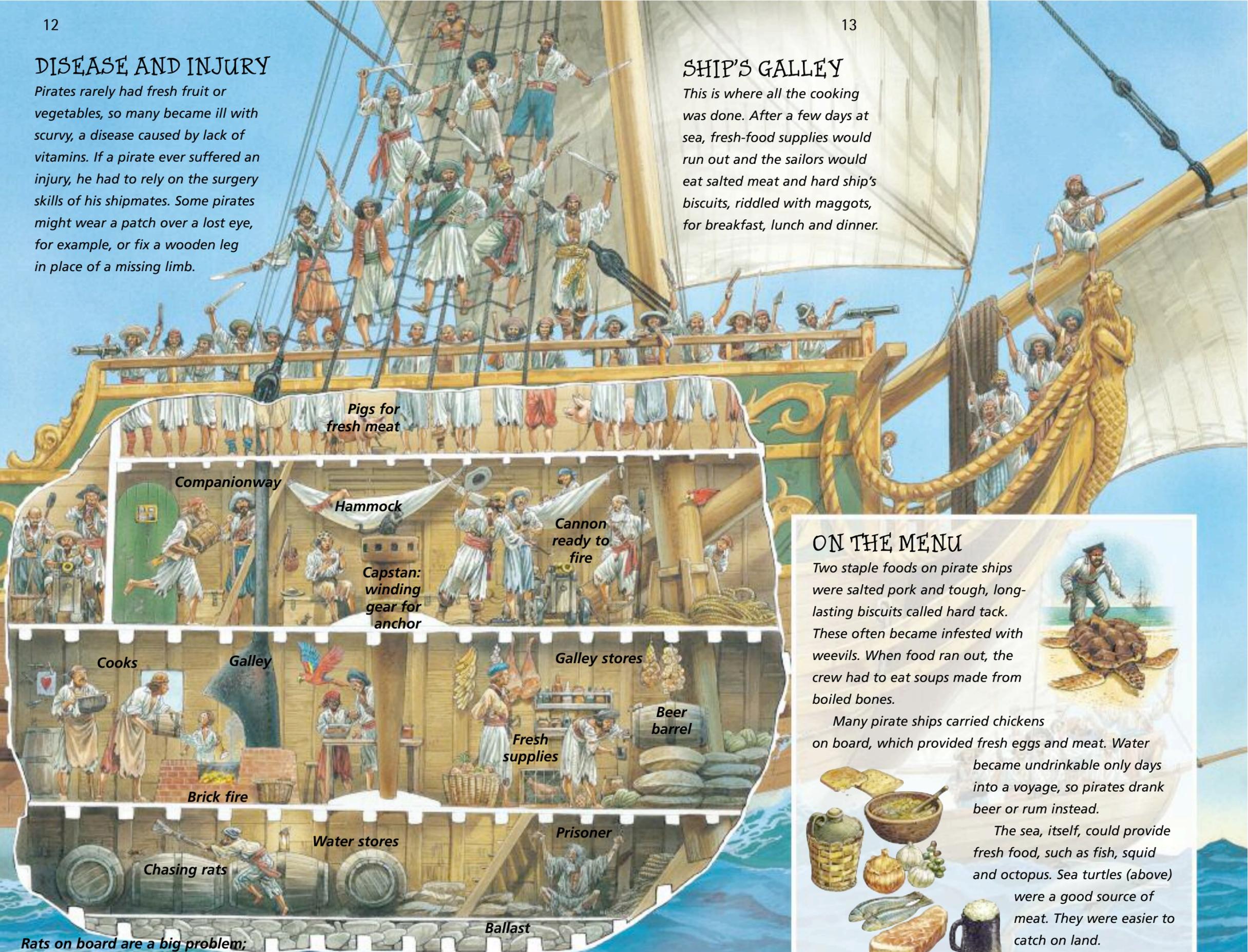
Pirates rarely had fresh fruit or vegetables, so many became ill with scurvy, a disease caused by lack of vitamins. If a pirate ever suffered an injury, he had to rely on the surgery skills of his shipmates. Some pirates might wear a patch over a lost eye, for example, or fix a wooden leg in place of a missing limb.

A pirate's life

When pirates are not plundering and pillaging, there are guns to maintain, decks to scrub and meals to cook. If they have time off, the pirates sing, dance, play cards or sleep. But all the time they keep an eye out for treasure ships on the horizon...

SHIP'S GALLEY

This is where all the cooking was done. After a few days at sea, fresh-food supplies would run out and the sailors would eat salted meat and hard ship's biscuits, riddled with maggots, for breakfast, lunch and dinner.



FIRING THE CANNON

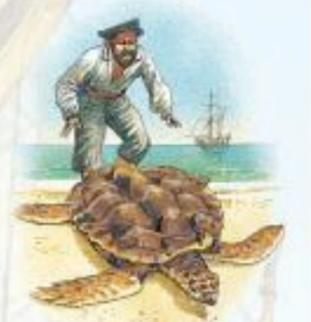
In order to fire the cannon, the stopper in its muzzle was first removed. Next, a case of gunpowder was placed inside the muzzle, followed by a cannonball. Both were rammed down the muzzle (above). Pulling on ropes, the crew hauled the cannon so its muzzle stuck out of the gunport (below). When the order came to fire, the gunner struck a match and touched it to the powder.



Rats on board are a big problem; they eat the food stores, chew through ropes and carry disease.

ON THE MENU

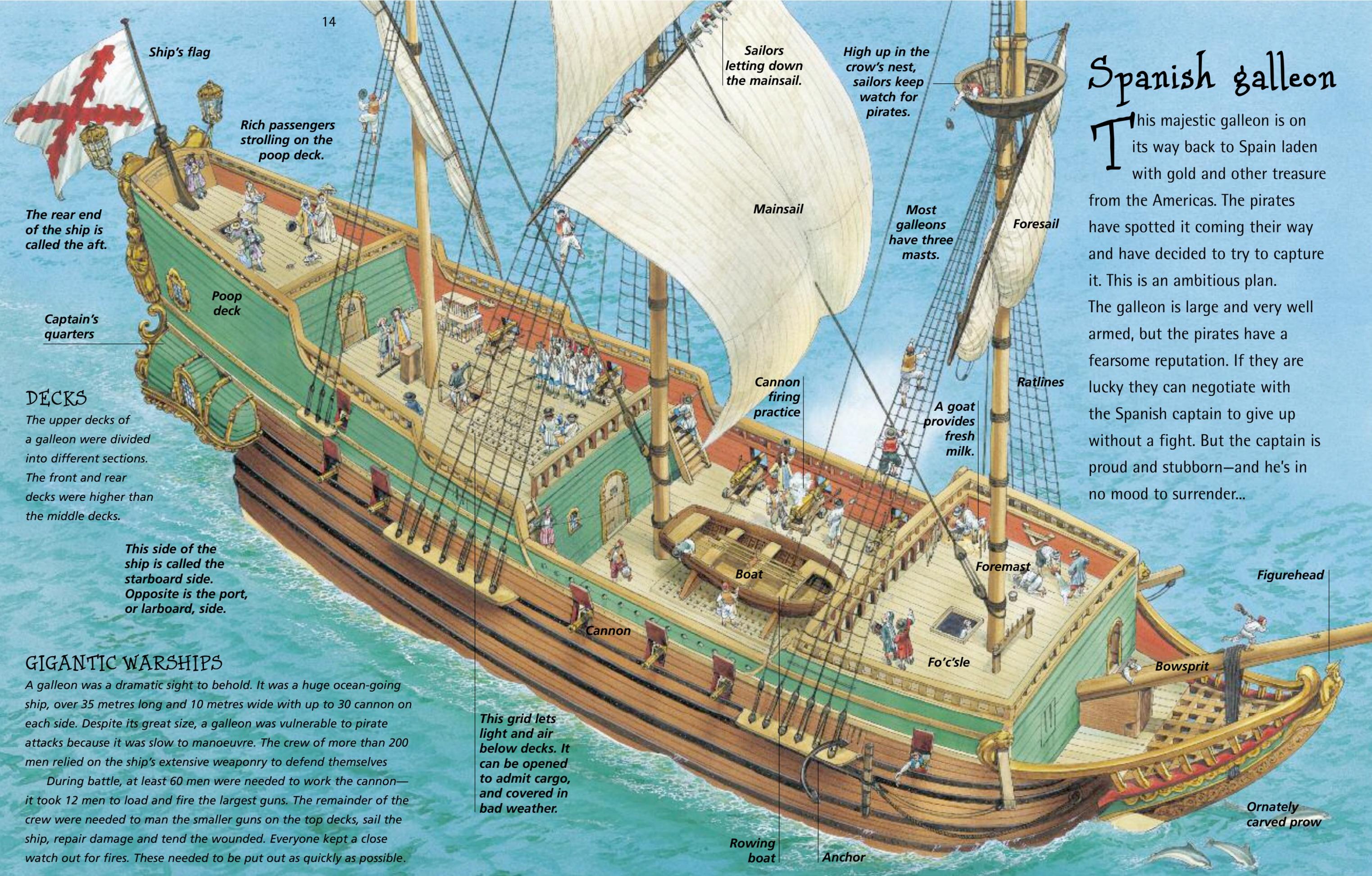
Two staple foods on pirate ships were salted pork and tough, long-lasting biscuits called hard tack. These often became infested with weevils. When food ran out, the crew had to eat soups made from boiled bones.



Many pirate ships carried chickens on board, which provided fresh eggs and meat. Water became undrinkable only days into a voyage, so pirates drank beer or rum instead.



The sea, itself, could provide fresh food, such as fish, squid and octopus. Sea turtles (above) were a good source of meat. They were easier to catch on land.



Spanish galleon

This majestic galleon is on its way back to Spain laden with gold and other treasure from the Americas. The pirates have spotted it coming their way and have decided to try to capture it. This is an ambitious plan. The galleon is large and very well armed, but the pirates have a fearsome reputation. If they are lucky they can negotiate with the Spanish captain to give up without a fight. But the captain is proud and stubborn—and he's in no mood to surrender...

Ship's flag

Rich passengers strolling on the poop deck.

Sailors letting down the mainsail.

High up in the crow's nest, sailors keep watch for pirates.

Mainsail

Most galleons have three masts.

Foresail

The rear end of the ship is called the aft.

Poop deck

Captain's quarters

Cannon firing practice

A goat provides fresh milk.

Ratlines

DECKS

The upper decks of a galleon were divided into different sections. The front and rear decks were higher than the middle decks.

This side of the ship is called the starboard side. Opposite is the port, or larboard, side.

Boat

Foremast

Figurehead

Cannon

Fo'c'sle

Bowsprit

GIGANTIC WARSHIPS

A galleon was a dramatic sight to behold. It was a huge ocean-going ship, over 35 metres long and 10 metres wide with up to 30 cannon on each side. Despite its great size, a galleon was vulnerable to pirate attacks because it was slow to manoeuvre. The crew of more than 200 men relied on the ship's extensive weaponry to defend themselves

During battle, at least 60 men were needed to work the cannon—it took 12 men to load and fire the largest guns. The remainder of the crew were needed to man the smaller guns on the top decks, sail the ship, repair damage and tend the wounded. Everyone kept a close watch out for fires. These needed to be put out as quickly as possible.

This grid lets light and air below decks. It can be opened to admit cargo, and covered in bad weather.

Rowing boat

Anchor

Ornately carved prow

Helmsman steering ship

Captain's sleeping quarters

TREASURE SHIPS

Spanish adventurers found little gold in the Americas, but they did discover silver at Zacatecas in Mexico and Potosi in the Andes. Vast quantities of this silver was mined and carried across land by mule or llama train to ports founded by the Spanish on the Caribbean or Gulf of Mexico coasts.



Each year, a fleet of galleons sailed in convoy to the Americas to collect treasures from Spain's colonies there. Once across the Atlantic, the fleet split up. The Tierra Firma Flota went south to collect silver from ports on the Caribbean coast (the "Spanish Main"). The Nueva España Flota sailed to Veracruz, Mexico, where it collected silver from the Zacatecas mines and goods shipped over from the Far East.

In the spring, the combined treasure fleet would travel back to Spain, protected by an escort of heavily armed men-of-war galleons (above).

Water barrels

This brick oven in the galley protects the wooden ship from the hot fire.

ALL ABOARD

Conditions on board the galley were crowded with so many people on board. Officers had cabins at the front and rear of the boat. Wealthy passengers also had their own accommodation in the stern. Ordinary crewmen, soldiers and servants had to find room for themselves and their belongings on the lower deck.

Crew relaxing

Live parrots

Cargo hold

Capstan

Rope

Gold ingots

Spare sails

Food stores

Rock ballast in the bottom of the ship stops it tipping over in high seas.

Inside a galleon

This galleon can carry about 500 toneladas (Spanish tons). Below the upper decks is the main deck, measuring around 30 metres long. At the stern end are the captain's quarters. Below the main deck is the lower deck or gundeck. A galleon of this size carries about 24 cannon. The holds, containing the ship's stores and its cargo, lie beneath the lower deck. At the very bottom of the ship are the bilges packed with heavy stones, called ballast, to help keep the ship upright in the water.

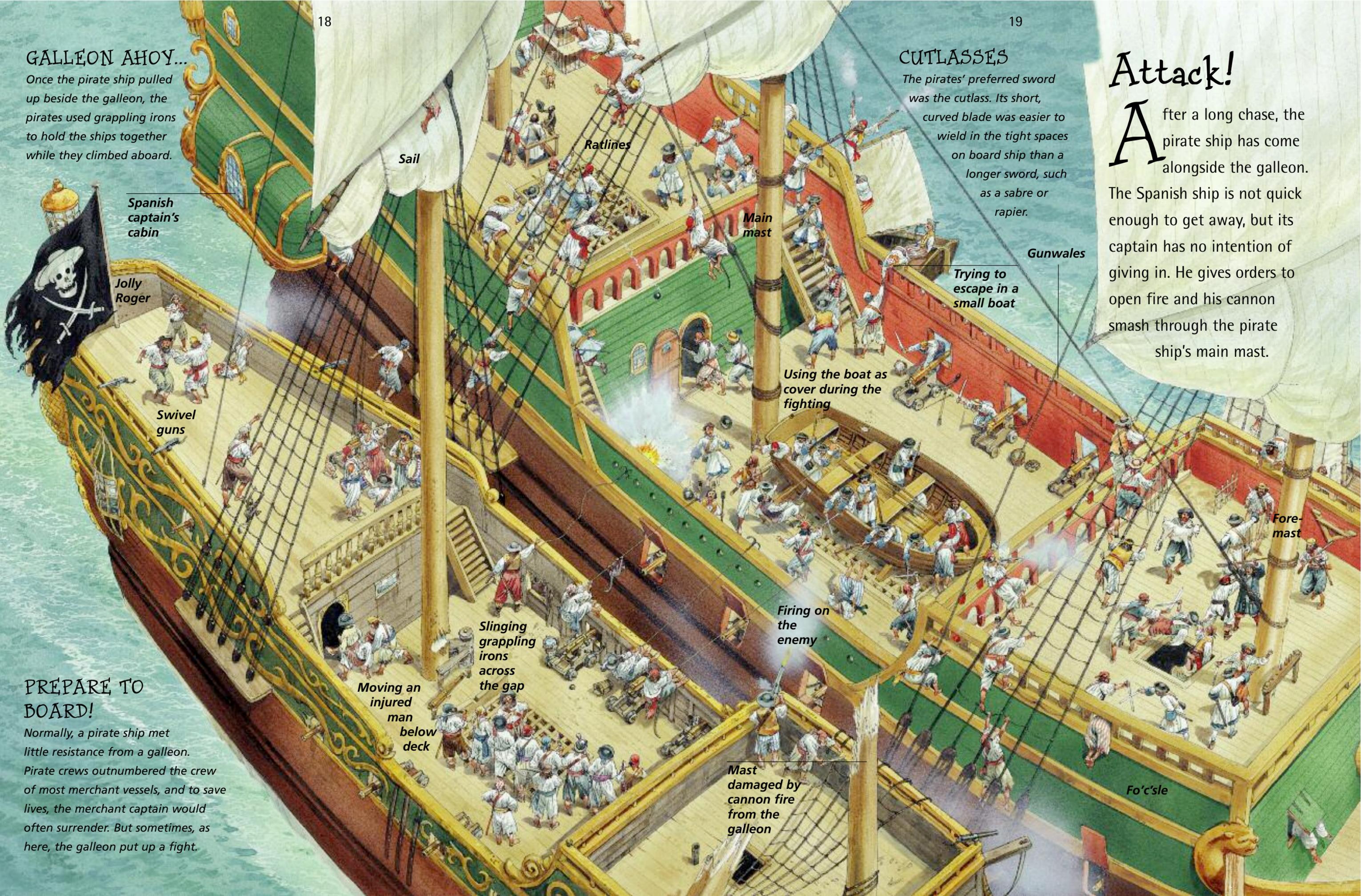
SPANISH TREASURE

The Spanish turned nearly all the the gold and silver objects they obtained from the Americas into coins. Gold coins were called "doubloons" and silver coins were "pesos". These were divided into eight smaller silver coins called "reals", which had an "8" stamped on them. This is why the coins were often called "pieces of eight" by the pirate crew.



GALLEON AHOY...

Once the pirate ship pulled up beside the galleon, the pirates used grappling irons to hold the ships together while they climbed aboard.



Spanish captain's cabin

Jolly Roger

Swivel guns

PREPARE TO BOARD!

Normally, a pirate ship met little resistance from a galleon. Pirate crews outnumbered the crew of most merchant vessels, and to save lives, the merchant captain would often surrender. But sometimes, as here, the galleon put up a fight.

Moving an injured man below deck

Slings grappling irons across the gap

Mast damaged by cannon fire from the galleon

CUTLASSES

The pirates' preferred sword was the cutlass. Its short, curved blade was easier to wield in the tight spaces on board ship than a longer sword, such as a sabre or rapier.

Attack!

After a long chase, the pirate ship has come alongside the galleon. The Spanish ship is not quick enough to get away, but its captain has no intention of giving in. He gives orders to open fire and his cannon smash through the pirate ship's main mast.

Ratlines

Sail

Main mast

Gunwales

Trying to escape in a small boat

Using the boat as cover during the fighting

Firing on the enemy

Fore-mast

Fo'c'sle



Fire bomb

Cutlass

WEAPONRY

Most pirates carried a cutlass, which, because of its short blade, was easy to use in the tight spaces on board. A sword with a longer blade might catch in the rigging. A dagger was easy to carry on a belt. It was useful below decks, where there was little room to swing even a cutlass.

When about to board an enemy ship, the pirates might throw handmade bombs on to the deck. The smouldering mixture of rags and tar created a smokescreen — the perfect cover for marauding pirates.

A musket was suited to shooting from a distance while a musketoon or pistol was better at short range. A flintlock pistol was light and portable but damp sea air sometimes caused it to misfire.



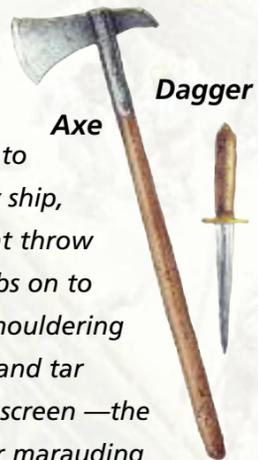
Flintlock pistol



Musketoon



Musket



Axe

Dagger



Defending the ship

Most galleons have guards aboard to defend the ship from marauding pirates. But even with guards, the galleon stands little chance against the battle-hardened pirates. The pirate crew is large, determined and well-armed. Wielding swords and firing pistols, the pirates stream on to the galleon and join battle with the guards.

PORT AND GOVERNOR

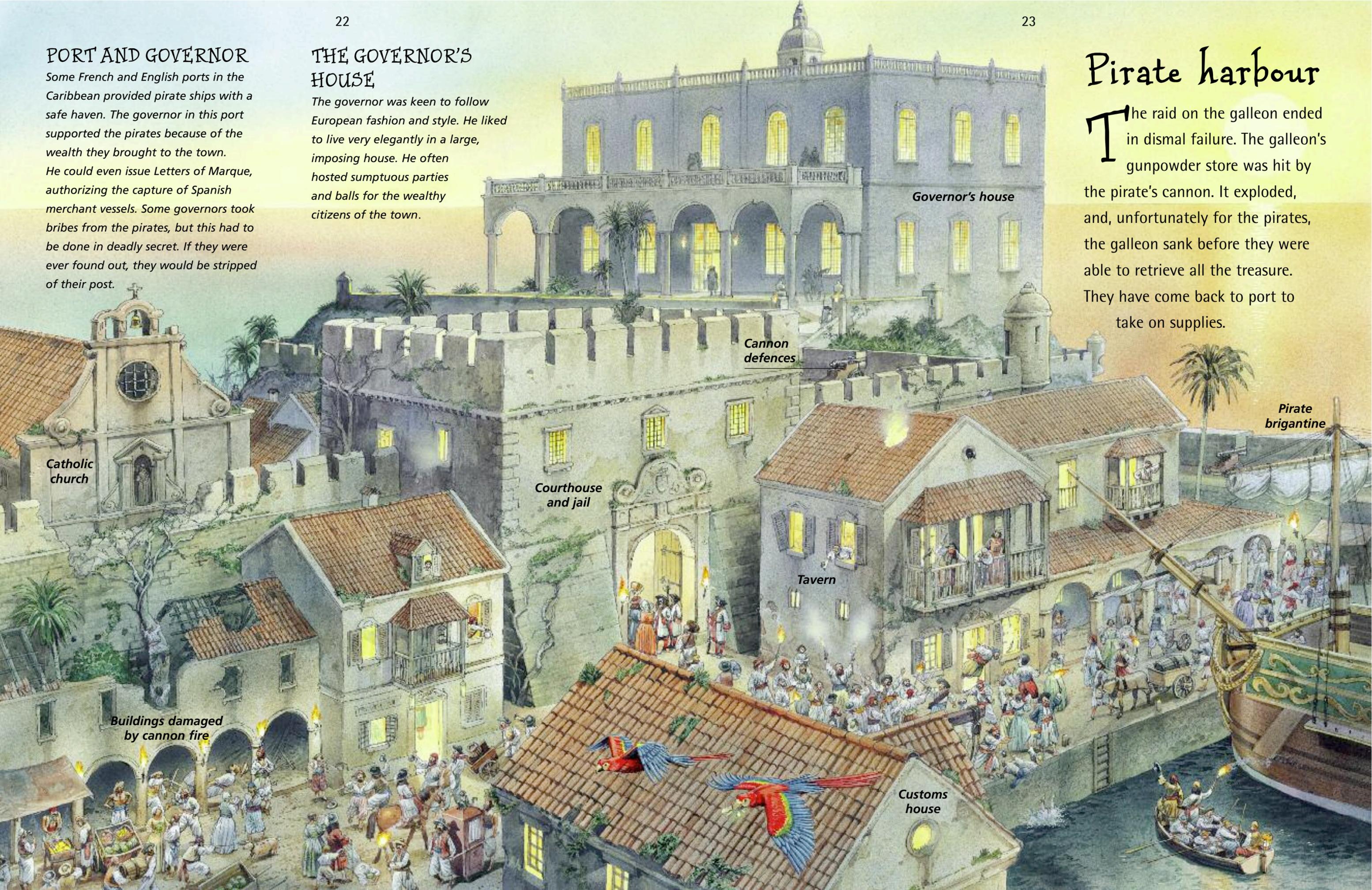
Some French and English ports in the Caribbean provided pirate ships with a safe haven. The governor in this port supported the pirates because of the wealth they brought to the town. He could even issue Letters of Marque, authorizing the capture of Spanish merchant vessels. Some governors took bribes from the pirates, but this had to be done in deadly secret. If they were ever found out, they would be stripped of their post.

THE GOVERNOR'S HOUSE

The governor was keen to follow European fashion and style. He liked to live very elegantly in a large, imposing house. He often hosted sumptuous parties and balls for the wealthy citizens of the town.

Pirate harbour

The raid on the galleon ended in dismal failure. The galleon's gunpowder store was hit by the pirate's cannon. It exploded, and, unfortunately for the pirates, the galleon sank before they were able to retrieve all the treasure. They have come back to port to take on supplies.



Catholic church

Governor's house

Cannon defences

Pirate brigantine

Courthouse and jail

Tavern

Buildings damaged by cannon fire

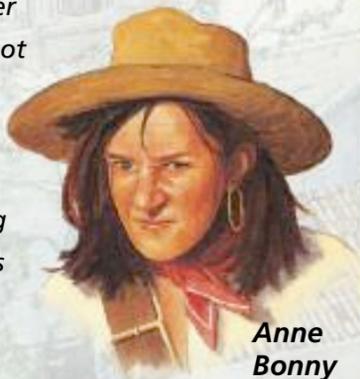
Customs house

Blackbeard



NOTORIOUS PIRATES

Some pirates achieved great notoriety. Edward Teach, nicknamed Blackbeard (above), terrified crews by tying burning fuses to his hair and beard. Rewards were offered for the capture of pirates such as Blackbeard. An expedition of two naval ships tracked him down in 1718. He was eventually killed, but only after being shot five times and receiving 20 blows from a sword.



Anne Bonny

Anne Bonny was one of the few female pirates. She dressed up as a man to join Calico Jack's pirate crew. In 1720, the ship on which she sailed was attacked by a King's ship. Most of the crew were sentenced to death, but Bonny avoided the noose because she was pregnant.

PRIVATEERS

"Privateer" was short for "private man-of-war", someone hired by a king or government to capture and plunder foreign ships on their behalf. When countries stealing from each other made peace, many privateers became pirates, seamen who stole from other ships purely for their own gain.

Courthouse and jail

The pirates spend much of their money getting drunk in the town's taverns and bars. But their rowdy antics can land them in jail. Conditions in the jail are primitive and disease is rife. Some unlucky ones may even die before their case is ever heard.



A party in the governor's house

Decorating

Soldier on lookout duty

Pirate captain presents treasure to the governor.

Inside the tavern

Prison cell

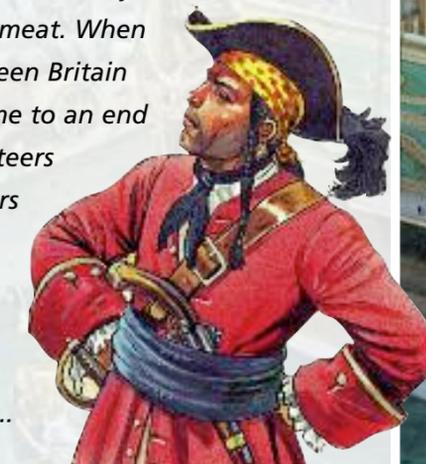
Armourers

Inside the customs house

Winching up goods taken from the pirates

BUCCANEERS

Islanders from the island of Hispaniola turned to piracy after they were forced from their island by the Spanish. They were called "buccaneers" after the "boucan" barbecues on which they smoked their meat. When the war between Britain and Spain came to an end in 1714, privateers and buccaneers joined forces. For the next decade they terrorized the seas together...



STAYING AFLOAT

There were many ways in which a ship could be wrecked. Apart from being sunk in battle, ships could be tipped over by a badly-loaded cargo. Some were poorly designed in the first place: their tall shape caused them to overturn in the slightest wind. Out at sea, storms could whip up huge waves that could down a ship. Closer to shore, coral reefs or rocks lying just below the water's surface could damage a hull.

DANGEROUS DIVE

People can normally hold their breath underwater for only a minute or so, but pearl and coral divers train themselves to hold their breath for several minutes. Even so, exploring the inside of the wreck like this was dangerous. But the rewards on offer were so great, the divers were prepared to take the risk.



Turtles

Hammerhead shark

Shipwreck

It has been almost a year since the galleon sank, but the pirate captain remembers its exact position. He has returned with some divers who will swim down to the wreck and try and recover the treasure.

The ship has almost broken in two here.

Ratlines

Gunport

Turtle

Cannonball damage

A diver struggles to the surface with a piece of the treasure.

Main mast

Stingrays

Jellyfish

Crow's nest

Broken spar

Treasure chest

Cannon



Small items are carried to the surface by air-filled lifting bags.

FINDING A WRECK

Finding a shipwreck can be a long and difficult task. Historic documents and charts are often the only source of information about the location of a sunken ship, and they are often inaccurate and vague. But once in the right area, research vessels can pinpoint the shipwreck exactly using detection equipment, such as sonar, which locates objects using sound waves.



A signal given by a metal detector may be the only clue to a precious item hidden beneath the sea bed. The sediment can be brushed away to reveal an exciting find.



Sunken treasure

Many galleons have been lost on their return to Spain, either to pirates or to violent tropical storms. With the value of the cargo being so high, great efforts are made to salvage the wrecks. Luckily the sea is fairly shallow here, so the wreck is not too deep for the men to reach.

This hammerhead shark has eaten some of the objects from the galleon.



Hammock

Food stores

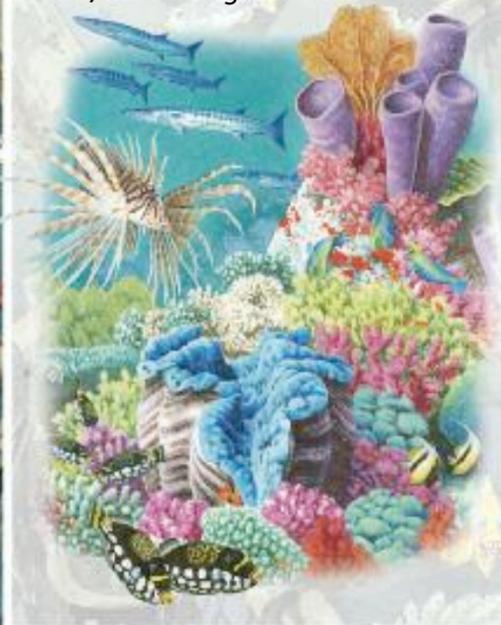
Capstan

Barrels

Treasure chests

CORAL

Corals are tiny animals that thrive in warm shallow seas like the Caribbean. They group together in colonies and make hard cases to live in. These build up into fantastically shaped reefs and are often brightly coloured. Many other sea creatures, such as fish and crabs, live among the coral.



Glossary

Backstaff A tool that measures the sun's position, and shows how far north or south the ship has travelled.



Ballast Stones packed into the bottom of the ship, or *bilges*, to keep the ship upright, especially in rough weather.

Bilges The lowest part of the ship where ballast is placed. They tend to fill up with smelly, stagnant water.

Brigantine A fast, two-masted ship much favoured by pirates.

Cutlass A pirate sword with a short, broad, sometimes curved blade.

Desertion When a sailor abandons his ship for a better life, often to become a pirate.



Doubloon A Spanish gold coin.

Galleon A large, three-masted cargo ship used mainly by the Spanish to transport treasure back to Spain.

Grappling iron A rope with a many-pronged iron hook on the end used for throwing on to the deck of another ship to secure the two ships together.

Gunports Square holes fitted with hinged lids in the side of the ship to shoot cannon through.

Jolly Roger The flag flown by pirate ships (*right*).



Musket A long, single-shot gun.

Musketoons A shorter version of the *musket*, popular with pirates.

Mutiny When a group of sailors are in open rebellion against their captain.

Pieces of eight The pirate name for Spanish silver coins (*left*).

Pirate A sea robber.

Spanish Main The Caribbean coast of South America, claimed by Spain.

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