INSIDE: ROBIN HOOD: CANTERBURY TALES: MAN AND HIS BRAIN

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No. 98, 30th NOVEMBER 1963

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No. 98. 30th November, 1963 Fleetway House, Farringdon Street, London, E.C.4. Tel.: CENtral 8080

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BETWEEN OURSELVES

The Wars of the Roses began in 1453. True or false? False, because the first of the wars was fought in 1455.

Does it matter? Yes, because accuracy in figures is always important. But getting dates right does not mean that you are necessarily "good at history," for history is made up of people, events, and a changing pattern of life. The aftermath of a battle is just as important as its outcome, and educational authorities today are saying that they would like to see more emphasis given to such things.

For example, George III reigned from 1760 to 1820. During that time we fought in the American War of Independence (1775-83). Is that all? By no means. It was the period of the Industrial Revolution, which brought fantastic changes into the lives of our people.

The Crimean War was fought in 1854-56 and 19,600 British soldiers died. But 15,700 died of disease, not wounds, and Florence Nightingale's first battles against the cause of this laid the foundation of our modern hospital system.

So, try to remember your dates. But, equally important, remember the other history that was being written at the time.

The Editor

Quick Quick QUIZ

- 1. In which museum is the Venus de Milo statue?
- 2. What was the nationality of the painter Rembrandt?
- 3. Who was the court painter to King Henry VIII?

SCIENCE

- 1. What is a dia-magnetic material?
- 2. What is photomicrography?
- 3. In which part of your body are the ulna and radius bones?

LITERATURE

- 1. Who wrote a book called Utopia?
- 2. "English Bards and Scotch Reviewers" was written by a famous English poet as a protest against criticism of his work. Who was he?
- 3. What was the name of the heroine of Thackeray's novel Vanity Fair?

GEOGRAPHY

- 1. Where would you find the province of Manitoba?
- 2. What is the chief product of Trinidad?
- 3. Of which American state is Little Rock the capital?

PEOPLE

- 1. Donald Campbell's father was a land-speed record holder between the two world wars. What was his name?
- 2. In 1859 a Frenchman crossed the Niagara Falls on a tightrope. Who was he?
- 3. What was the name of the film star wife of Prince Rainier of Monaco before she was married?

ANSWERS ON PAGE 27

TREASURE

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Remember the title . . .

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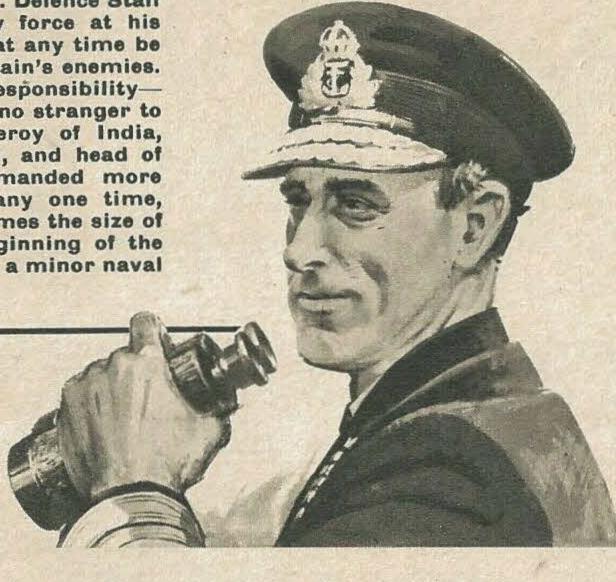
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MEN OF POWER: LORD MOUNTBATTEN-Part One

CAPTAIN OF THE KELLY

"One of the most powerful men in Europe" is a description that might well be applied to Admiral Lord Mountbatten of Burma. In his capacity of Chief of the U.K. Defence Staff he has a formidable military force at his disposal, a force which could at any time be swung into action against Britain's enemies. It is a post carrying heavy responsibility but the handsome Admiral is no stranger to command. He has been Viceroy of India, C .- in-C. in the Mediterranean, and head of Allied Forces. He has commanded more men than Napoleon did at any one time, ruled a country over twenty times the size of Great Britain. Yet at the beginning of the second World War he was only a minor naval commander.

Mountbatten's name first became known to the public in 1940. On a misty May evening the destroyer he was commanding, H.M.S. Kelly, was torpedoed off the Dutch coast. The ship's name, linked with that of Mountbatten, was soon spread across the front pages of every newspaper.





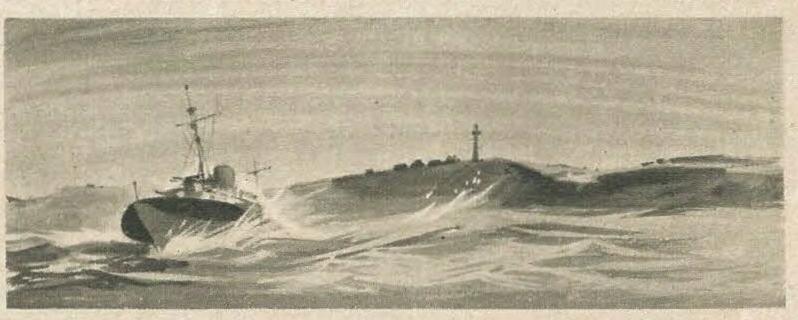
The German torpedo blew a 50-ft. hole in Kelly, from waterline to keel. Yet somehow the 40-year-old captain managed to bring his crippled ship back to port, with good seamanship and the luck that has been with him all his life.



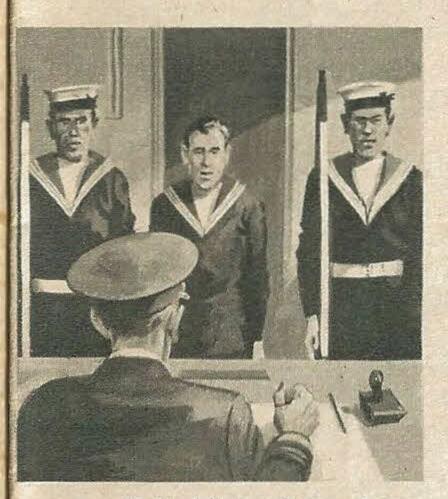
A great-grandson of Queen Victoria, Louis Mountbatten was born at Windsor in 1900. The first responsibility he knew was that of looking after his own pets.



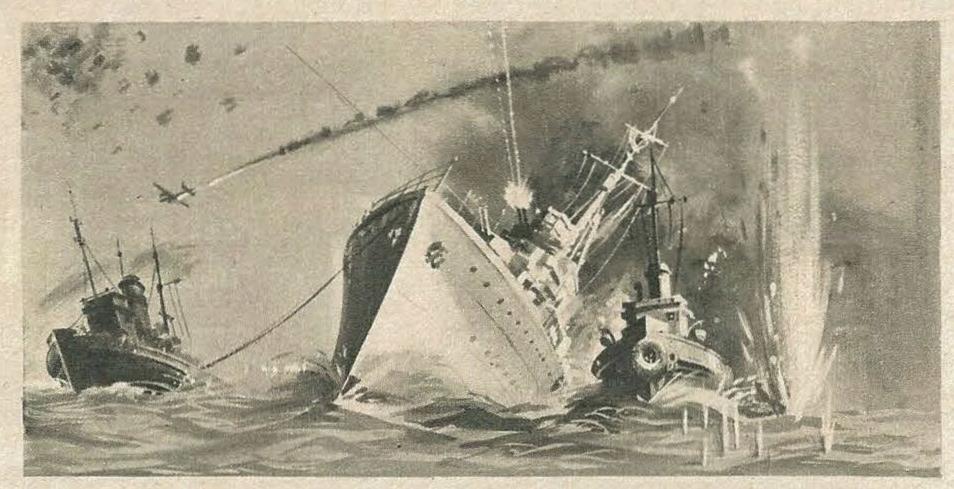
Since his father was First Sea Lord, it was natural that Louis should enter the Navy. He served as a cadet for two years.



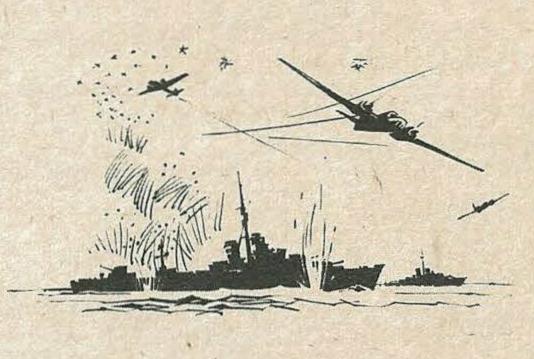
From the beginning Mountbatten was a successful officer, and towards the end of the first World War he was made second-incommand of a small escort vessel, H.M.S. P-31. In 1939 he became captain of the Kelly and head of the 5th Destroyer Flotilla.



Kelly hit a mine and was badly damaged. Only one man panicked and deserted his post. But Mountbatten let the man off, blaming himself for a failure in discipline.



Five months later Kelly was torpedoed. The epic journey back to port had begun. With forward boiler room flooded, starboard gunwale awash and decks listing to 45 degrees, Mountbatten jettisoned his torpedoes and depth charges to lighten the ship as she was towed home under repeated bomber attacks. Three times the towing cable snapped, but a haggard, unshaven Mountbatten refused to leave his ship. After 91 hours Kelly reached the Tyneside yard where she was first built.

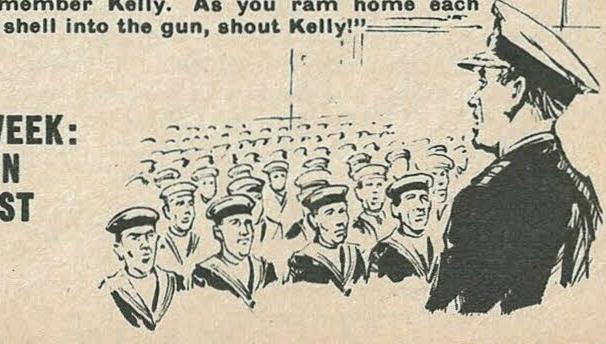


Mountbatten took over another destroyer.
Attacked by German dive-bombers, he radioed for R.A.F. fighters, but British bombers arrived and attacked their own destroyers by mistake. Mountbatten's furious report helped to establish a combined services' H.Q.



In the repaired Kelly, Mountbatten was ordered to Crete in 1941, to support the Allied invasion. But as he returned to Alexandria a concentrated German bomber attack turned the gallant Kelly over completely. Three and a half hours later the survivors were picked up. Before leaving for Britain, Mountbatten told them: "Next time you are in action, remember Kelly. As you ram home each shell into the gun shout Kelly!"

NEXT WEEK: PERIL IN THE EAST





WHAT REALLY HAPPENED?

Probably there was a Robin Hood-for his name is on record more than once. It is about the way that he spent his life that the evidence is thin

HE banqueting room of Nottingham town hall was packed with richly clothed nobles, tearing hunks of roast beef from enormous joints and swilling them down with gulps of wine from glittering silver cups. At the head of the table sat the Sheriff, rich, powerful and cruel. A servant banged a gong, and the Sheriff rose unsteadily from his throne-like chair, and cried out:

"Gentlemen, I give you a toast! To the downfall of Robin Hood, and God Bless our Prince John!"

The grating of a score of chairs across the floor mingled with the hearty cheers of the guests as they clanked their cups together in reply. Suddenly, a door banged, followed by the noise of other doors and windows being opened and shut. A tall, handsome man, clothed in green and wearing a forester's cap, leapt on to the table.

From the other doors and windows emerged a dozen similarly dressed followers, armed with swords or bows.

The Sheriff sank back into his chair. "It's Robin Hood!" he gasped hoarsely, and the tall man in green smiled.

"Turn out your pockets, gentlemen," he ordered. . . .

Little Evidence

LEW people have not at some time or other had I this sort of image of Robin Hood, the celebrated outlaw of Sherwood Forest, who robbed the rich to give to the poor, who was the implacable enemy of Prince John and the Sheriff of Nottingham. Countless books, plays and films tell this tale in a variety of ways, and no imagination or colour has been spared in the repetition of what is one of England's most popular legends.

But did Robin Hood exist, and, if so, was he as legend has portrayed him?

The evidence for Robin's existence is meagre, to say the least. Most of what we know is derived from poems, ballads and plays, and these have all taken great liberties of fancy. Throughout the literature, however, there runs a slender thread of historical fact.

Beginning with the poetry, the earliest ballads mentioning Robin's name were written in the north of England in the Middle Ages. A continuous dramatic story, combining elements of most of these, was compiled in a lengthy ballad called "The Lytell Geste of Robyn Hode," by Wynkyn de Worde, at the end of the fifteenth century.

Additions to the legends were made over the next 200 years, some of which confused details of Robin's career with those of Hereward the Wake and Sir William Wallace.

If the authenticity of Robin were to rest entirely on the literary references to him, it is easy to see why to some he never existed at all.

There is more evidence than these literary references, however, and some arguments in favour of Robin's genuine existence are worth considering.

The author of The Vision of Piers Plowman, William Langland, refers to Robin. This book, which has some history in it, was produced during the reign of Edward III (1327-77). It contains a couplet uttered by a drunken priest:

"I kan not perfitly my Paternoster as the

prest it sayeth, But I kan rymes of Robyn Hode and Ranulf, Earl of Chester."

This means that the fame of Robin was fairly widely known by the middle of the fourteenth century. Moreover, Ranulf, Earl of Chester, was a genuine historical figure, who besieged Not-

In the 1340s a Scottish historian, John Fordun, wrote: "In that time [i.e. the reign of Richard I] arose among the disinherited the famous free-

booter Robert Hood, whom the common people are so fond of celebrating by games and plays."

tingham Castle in 1194 on behalf of Richard I.

The suggestions derived from the ballads and plays give two periods of history at which Robin existed, in two different districts. Some say that he was a contemporary of Edward II, and came from Wakefield, in Yorkshire. This idea gains some support from the fact that in the Household Accounts for 1323 a Robyn Hode received payment of 3d. per day as one of the valets of the chamber. The payment ran for six months, at the end of which Hood received a gift of 5s. because "he could no longer work."

But despite this, the name Hood was not uncommon in Yorkshire and several Hoods were actually employed in royal service.

Outlaw Bands

THE other suggestion of the literature is that Robin lived in the reign of Richard I and operated in Sherwood Forest. On the strength of available evidence this placing of Robin is more acceptable. Both Langland and Fordun support it. Many Tudor historians believed it. There is a paper in the British Museum which states that Robin Hood was born in 1160.

In the Pipe Rolls of Henry III for 1228, 1230 and 1231, there occur entries to the effect that the Sheriff of Yorkshire owes 32s. 6d. to the Exchequer in respect of chattels of one Robertus Hod, fugitivus (Robin Hood, outlaw). A point worth noting here: Sherwood Forest extended into Yorkshire in the twelfth century.

If these dates in Henry III's reign were the closing years of Robin's life, they confirm that he was born in the reign of Henry II, and they allow him to have been active in Richard I's reign. Indeed, they make him a contemporary of Ranulf, Earl of Chester, as Langland asserted.

There is a case, then, for the existence of Robin Hood, and for the suggestion that he was a contemporary of King Richard I and King John. How he really occupied his life is not certain, but, as there were known to be several outlaw bands roaming the wooded districts of England at the time, engaged in lifting the riches of the nobles and distributing them among the poor, there is no reason why Robin should not have been the leader of one of these gangs.

One thing is certain—as such he will always remain firmly entrenched in the legends of England.

Robin Hood is often credited with the ambush of the Sheriff of Nottingham (right)







A SATELLITE speeds at thousands of miles an hour towards the Moon. Its mission is to televise the Moon's surface and radio pictures back to Earth.

Inside the satellite, buried beneath a maze of complex electronic equipment, wires and cables, Geiger counter and transistors, is a TV camera.

How can it "see" through all this space-age ironmongery to the outside?

Connecting the viewing lens of the camera with the outside metal skin of the satellite is a special cable of thousands of tiny glass fibres, coiling its way between the narrow crevices separating one piece of equipment and another.

The cable is the "light pipe," an amazing new device that enables a camera or even the human eye to "see" around corners. Light can pass along this twisting cable as easily as water or gas can pass through a hollow pipe.

The idea of a "light pipe" is not new. Almost a century ago the famous British scientist John Tyndal placed a bright light above a small cask of water. He then pulled out a cork closing a

small hole near the bottom of the cask. A curving stream of water poured out from the hole. The stream of water glowed mysteriously as light passed along its length.

Light is not actually bent as it travels along inside a glass or plastic rod. One of the most important properties of light is that it can only travel in straight lines, and a "light-pipe" does not make light break this rule.

In diagram 1 we show how light can go round corners and still travel in straight lines.

The light enters one end of the plastic rod, which is specially treated so that the light is trapped inside, and is reflected from part of the inside surface of the rod to another part of the surface. After bouncing back and forth along the inside of the rod from surface to surface it finally emerges from the other end.

Of course a picture cannot be sent along a curving rod.

But if, instead of one thick rod, we use a bundle of many small rods, each finer than a human hair, and project a picture (or a pattern of light and dark) on one end of the bundle, we can see the picture or pattern clearly on the other end. In diagram 2 we show how this works.

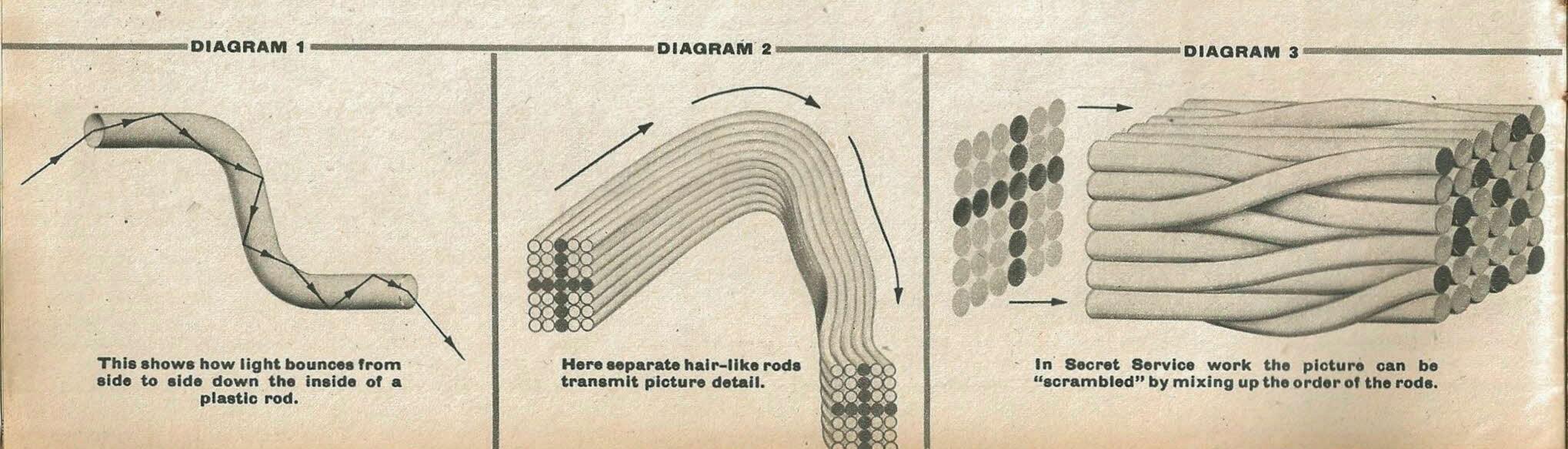
Each rod in the bundle takes care of a small section of the pattern or picture, and transmits its light, whether dim or bright, along its length. All the light is trapped inside, so that a complete picture is obtained.

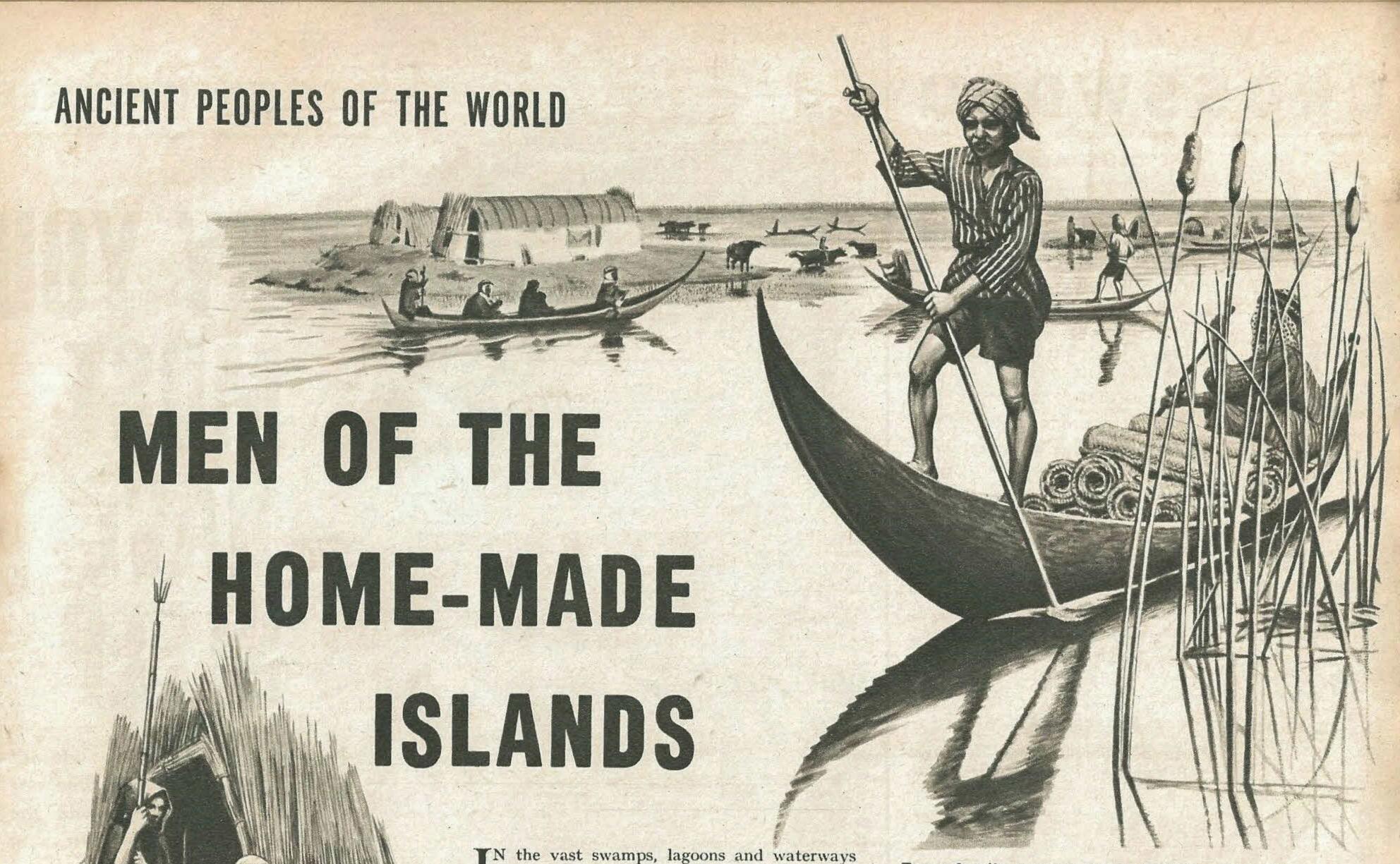
Pictures have been successfully "piped" along a fibre bundle 100 feet long. It has been calculated that each tiny glass fibre reflects light about a million times before it emerges from the other end!

One of the strangest uses being experimented with is in coding and decoding messages.

In diagram 3 the fibres making up a light pipe have been "scrambled." The cross diagram projected on one end looks quite unrecognizable at the other.

But if the "unrecognizable" diagram at right is viewed through a "decoder" light pipe which has exactly the same "scrambling," the cross diagram clearly can be seen. The "scrambled" light pipe is simply used in reverse.





that surround the lower Tigris and Euphrates rivers in Southern Iraq, the marshmen live a hard, lonely and bitter existence. They are mainly Arab people and live in reed houses on artificial islands, built of packed reeds. Although despised and shunned by the townspeople and Bedouin Arabs (nomadic desert tribes), the marshmen are a proud people. Their homeland has a very changeable climate. Sometimes tearing gales and floods turn the watery province into a great sea. At other times a damp, sticky heat settles, bringing with it clouds of mosquitoes.

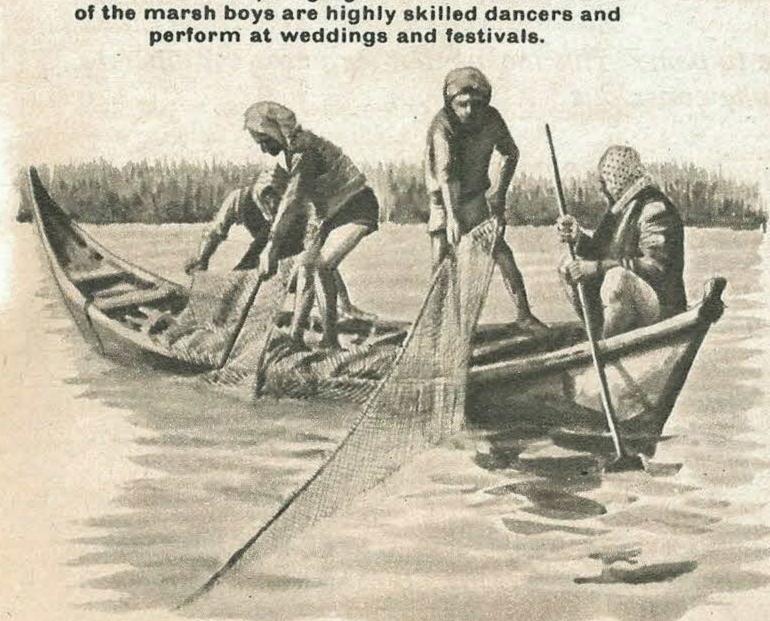
During the winter the marshes are full of wild

During the winter the marshes are full of wild life, ranging from herons, pelicans, flamingoes, eagles and otters to the marshman's worst enemy—the wild boar. Concealed in the reed beds, the boars, the largest in the world, destroy crops and often attack and kill the marshmen. The marsh Arabs are divided into two groups. The Fellah (the Arabic word for "ploughman") are farmers and grow rice and keep cattle. The Ma'dan are chiefly buffalo raisers. To them the buffalo is sacred and provides them with milk, cream, butter and dung for fuel. It is never killed for food unless dying of old age. Buffaloes are even used for barter—the price for a bride is usually, three buffaloes.

Every family owns a canoe, indispensable for transport, fishing and collecting reeds. Buffalo herders even carry their simple tent-like houses, made of reed mats, rolled up in their canoes.



Marsh Arabs are better nourished, heavier and bigger boned than the nomadic Arab tribes. This tough-looking one was chosen as a bodyguard by a wealthy land sheik.



Most Ma'dan families live in permanent villages

of about twenty islands. Often in the evenings,

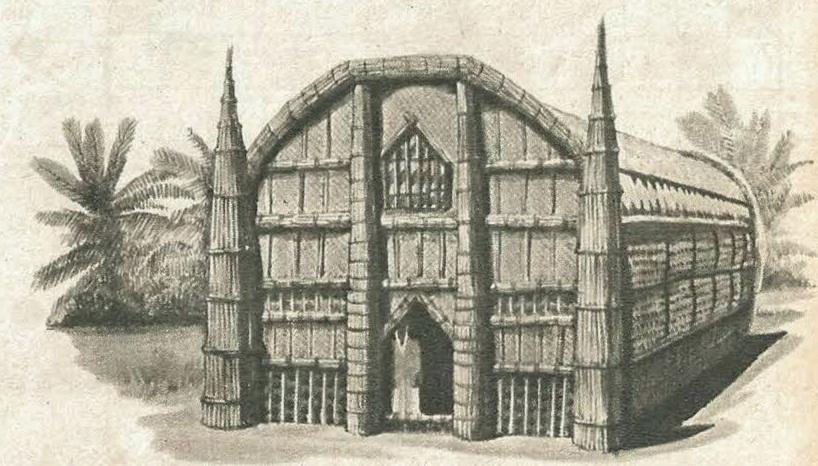
singing and dancing will begin in one of the

houses and soon the whole village paddles over

to join in. If there is no room on the island they

will surround it, singing in their canoes. Some

Although all marshdwellers fish, only the lowclass Barbura fishermen (a separate marsh people) do so with nets. The Ma'dan use a five-pronged spear and fish from their gracefully designed canoes which have a high curved front to push through dense reeds. In the flood season, not a foot of land is left above water, so the inhabitants leave their sodden reed houses and take to the boats. When the water has drained away they set to work rebuilding the islands, repairing their houses and laying in fresh supplies of reeds for animal fodder.



Like all houses in the marshes this guest house is made entirely of reeds, which grow twenty feet high. The main structure is built in the form of arches and the number of arches varies according to tribal decision. The entrance always faces Mecca (Mohammed's birthplace) and the size and decorative design of the building signifies the wealth of the owner.

CROSSWORD

OLUE TO

CLUE TO

5 DOWN

CLUE TO

CLUE TO

16 DOWN

11 DOWN

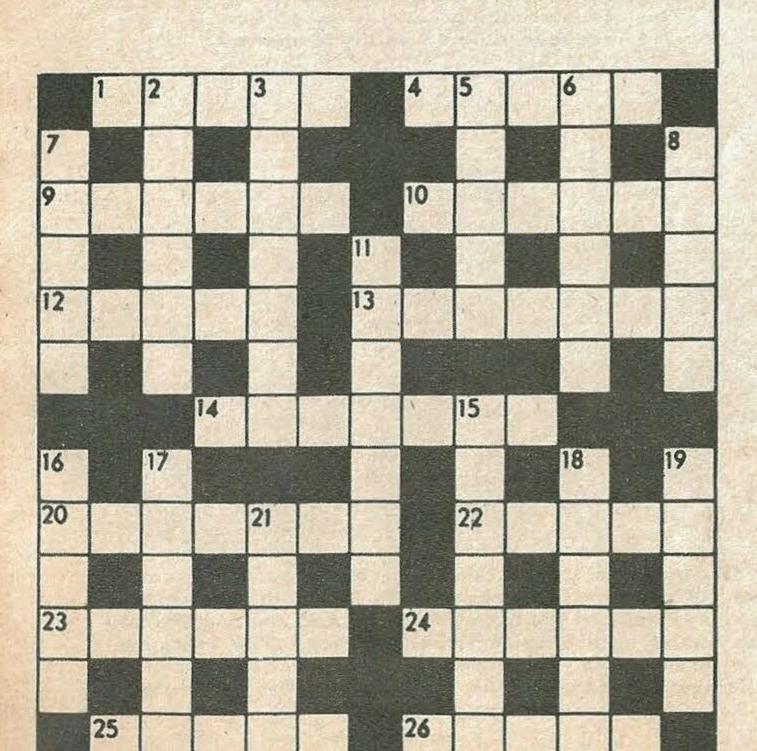
CLUES ACROSS

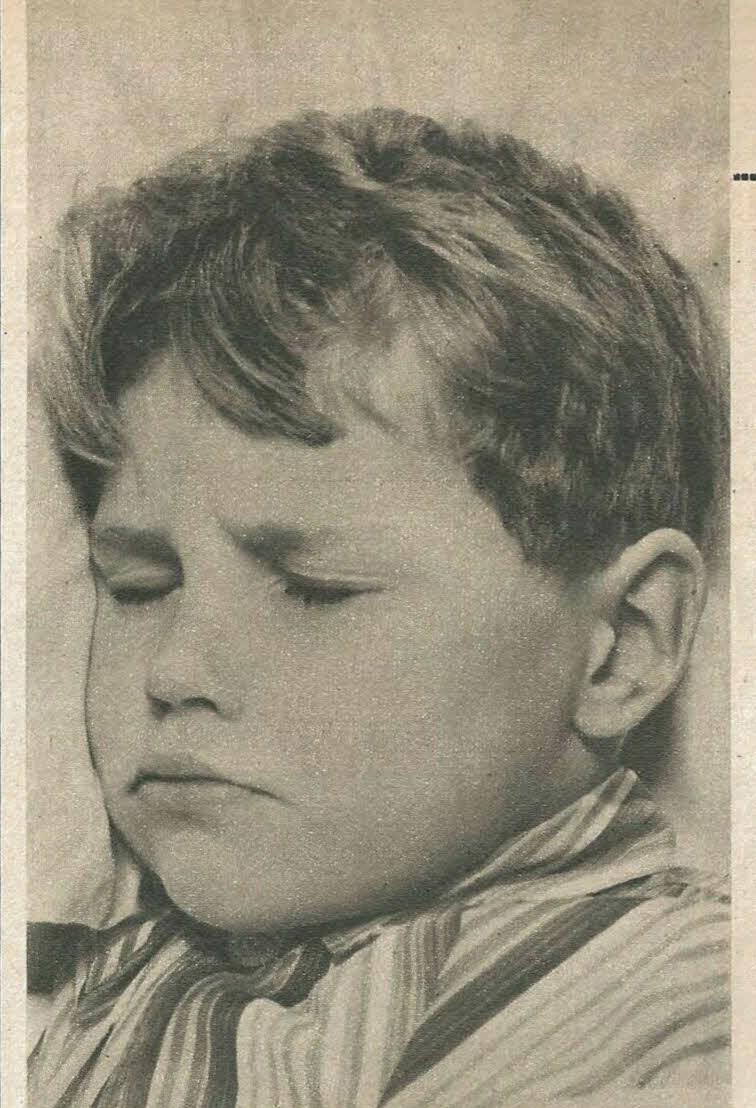
- 1. The Cup is an international lawn tennis trophy. (5)
- This London Lane has a worldfamous theatre. (5)
- 9. A discussion in Parliament. (6)
- 10. A broad roadway, usually lined with trees. (6)
- 12. One of the points of a garden fork.
- 13. A pirate of the Middle Ages. (7)
- 14. American word for a biscuit. (7)
- 20. To put together a musical work.
- 22. A slow musical movement; Handel's is very well-known. (5)
- 23. Army slang word for a recruit. (6)
- 24. A short race, like the 100 yards. (6) 25. Great river of Germany, noted for its vineyards. (5)
- 26. When suffering from this, people have a high temperature. (5)

CLUES DOWN

- 2. An old poetic name for Great Britain (think of West Bromwich). (6)
- Another word for a whole number.
- 5. The oldest grade of Boy Scout. (5) 6. Long concrete strip from which
- an aeroplane takes off. (6)
- 7. This means highly skilled. (5) 8. In Greek legend, Charon rowed
- one across the river Styx. (5) 11. These form when water drips in
- very cold weather. (7) 15. A blotting-out of the sun when the
- moon crosses in front of it. (7) 16. The seed from which an oak-tree
- springs. (5)
- 17. Unlike a cat's tongue, a dog's tongue is this. (6) -
- 18. To speak well of a person's work.
- 19. The great artery of the human body. (5)
- 21. Group of seven bright stars, three of which form "....'s Belt." (5)

SOLUTION ON PAGE 27





poison has been identified in the spine.

same thing happens in the brain.

muscle uses almost no energy at all.

before poisoning occurs. What is this poisoning,

and why does it accumulate? When a muscle

works we know that poisonous substances accu-

mulate that can only be removed when the

muscle rests. It seems likely therefore that the

But in fact the brain does not really rest during

sleep. A sleeping brain uses almost as much

energy as a waking brain, whereas a resting

SECRETS OF LIFE: Man And His Wonderful Brain-PART TWO

RIED

No one can live long without sleep. But even at bed-time our brains go on working—and the result of its work comes to us in the form of dreams

One theory about sleep is that during sleep TE usually spend eight out of every 24 hours asleep. Some people can do with the thoughts and impressions we receive while we are awake are sorted out and analysed. Throughless sleep than this, but no one can stay awake indefinitely. The longest period a man out the day the brain is literally bombarded by impulses. It has been estimated that a hundred has stayed awake deliberately is about nine days, but after a few days he started having hallucinamillion pulses flow from the sense organs to the tions, his attention wandered, he saw double and brain every second of our waking life. he staggered about in an uncontrolled way.

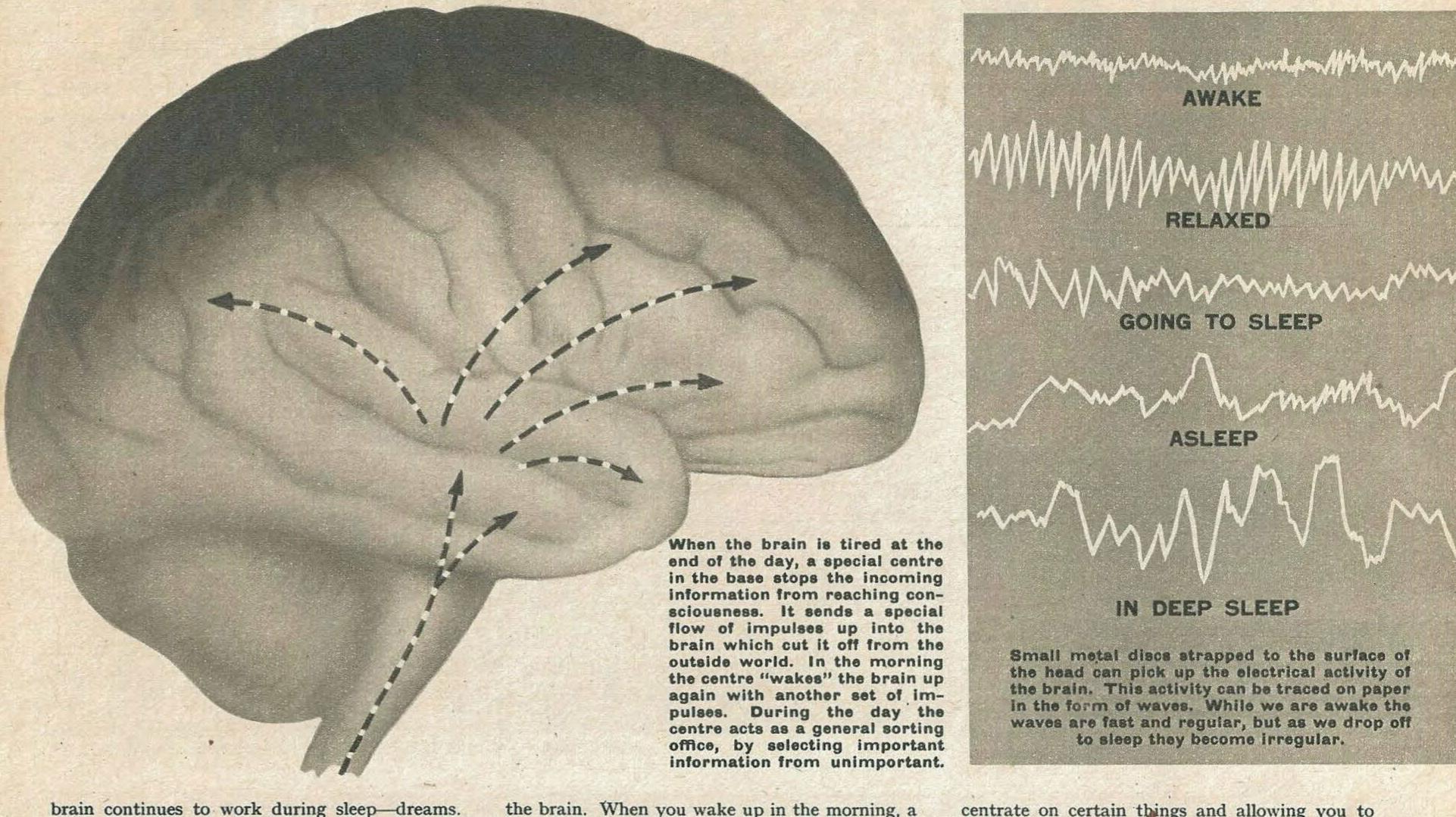
If all these impulses reached consciousness we A dog will die of brain poisoning after three should probably go mad. As it is, only a proportion of them pass to the higher parts of the brain, days of enforced wakefulness, and the actual but the brain still has to cope with all the Usually, of course, both men and dogs fall asleep information that remains unconscious.

> We have no way of preventing the bombardment. The only sense organ we can "turn off" at will is the eye, by blinking or closing the eyelid, but the rest this gives the brain is brief and inadequate.

to solve when they were awake. People have always been aware of the significance of dreams. Roman fortune tellers or soothsayers used to read all sorts of portents in dreams, and though their forecasts were often exaggerated, there was

It is only during sleep that we are virtually deaf and blind to the world. Perhaps during this period of isolation ideas and sensations are analysed and sorted out at a sub-conscious level. We have at least one piece of evidence that the

- That the brain is insensitive to pain? This means that surgeons can operate on it while the patient is fully conscious.
- That the brain's normal temperature is 98.6 deg. F.? If its temperature went up in a fever then you would become delirious; if it went down, as it might in severely cold conditions, then you would go into a coma.
- That the brain needs a constant supply of oxygen? If you went up a mountain without an oxygen mask the lack of oxygen in the air would cut the supply to the brain so drastically that you would fall down unconscious. On the other hand, if you inhaled pure oxygen unmixed with air, you would become intoxicated.
- That weightlessness, experienced by astronauts in space, also intoxicates the brain and causes the person experiencing it to make mistakes in judgement and movements?



the brain. When you wake up in the morning, a wave of impulses spreads from the reticular formation up into the upper part of the brain. These impulses are "waking up" impulses, and they can be traced in the form of a brain wave from the surface of the head.

Slowly you wake up and become sensitive to sounds and sights. During the day the reticular formation also plays a part in letting you con-

centrate on certain things and allowing you to ignore others-concentrate on listening to one person and not listen to all the distracting and irrelevant sounds around you.

MMmmm

GOING TO SLEEP

IN DEEP SLEEP

Small metal discs strapped to the surface of

the head can pick up the electrical activity of

the brain. This activity can be traced on paper

in the form of waves. While we are awake the

waves are fast and regular, but as we drop off

to sleep they become irregular.

At the end of the day, you lie down to sleep and a wave of new impulses, this time "going to sleep" impulses, spread from the reticular formation up into the brain and effectively cut you off from the world.



Necessary Dreams

a grain of truth in what they did.

It has been estimated, by recording the "brain

waves" the brain gives off when it works, that

everyone dreams at night, often for brief periods

only, even though they may not remember

Sometimes mathematicians arrive at solutions

to problems during sleep that they were unable

it when they wake up.

THE Austrian scientist Sigmund Freud, whose I name is a household word today, believed that it is in dreams that we allow our suppressed thoughts to be aired. In dreams we often think of things we were frightened of when awake.

Freud suggested that if we continually suppressed our thoughts without being able to think about them in dreams, the pressure on us might be unbearable. Dreams are essential to our health.

Although it cannot be proved, it is possible that animals dream. When a sleeping dog twitches its legs, for example, it may be dreaming it is running after something.

Even if we do not know the complete significance of sleep we do know something about the mechanism of sleep. Sleep is not, for example, the same as a coma, although both involve loss of consciousness. A coma results from a blow on the head, in which the brain bumps against the skull from which it is separated by a small gap.

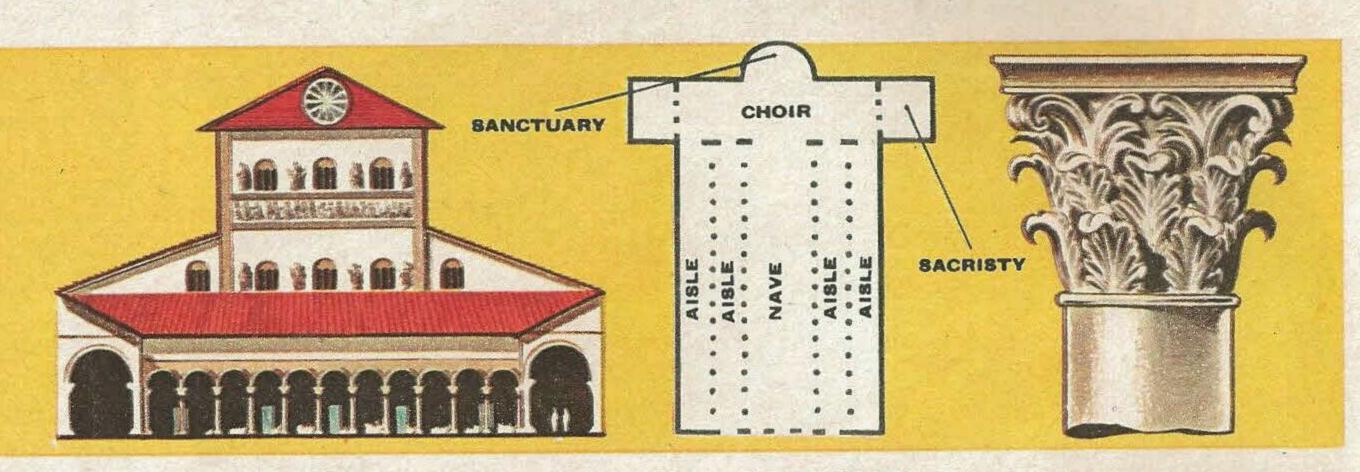
During a coma, the person is unconscious and dead to the world. When he recovers he suffers from loss of memory, a headache and sometimes confusion. None of these result from natural sleep.

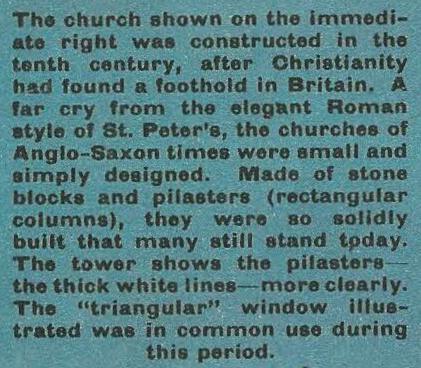
Natural sleep occurs gradually, and it appears now that there is a special part of the brain, found in the brain stem, that literally sends you to sleep and wakes you up.

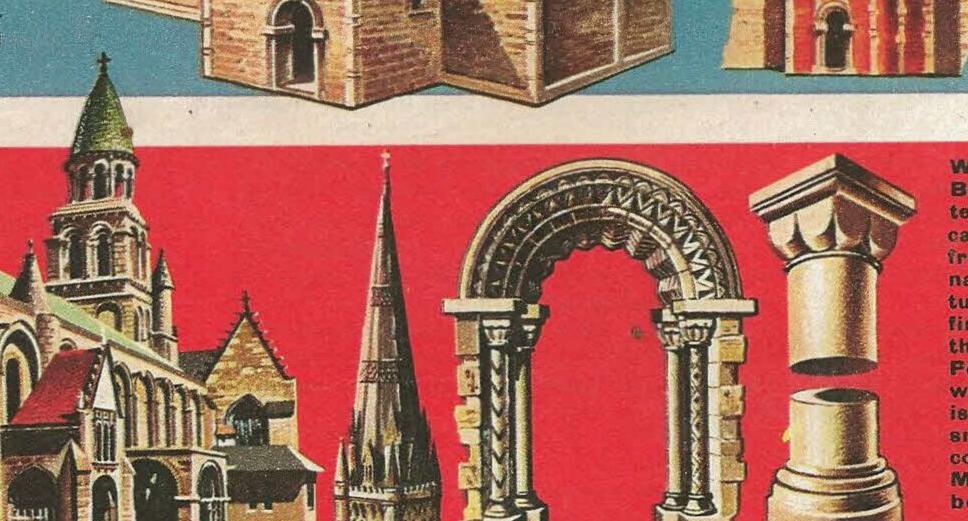
This part of the brain, called the "reticular formation," is also the general alerting station of

The CHURCH BUILDERS

In the reign of the Christian Roman Emperor Constantine, St. Peter's Church in Rome was built. It included material taken from other Roman buildings, such as column heads, called capitals. The church was destroyed in 1450, but its design served as the model for later churches. The Nave, which you can see in the diagram, gets its name from the Latin word navis, meaning ship. The early Christians regarded their church as a ship which would carry them through the stormy seas of life, so the part of the church where they worshipped was called the Nave.



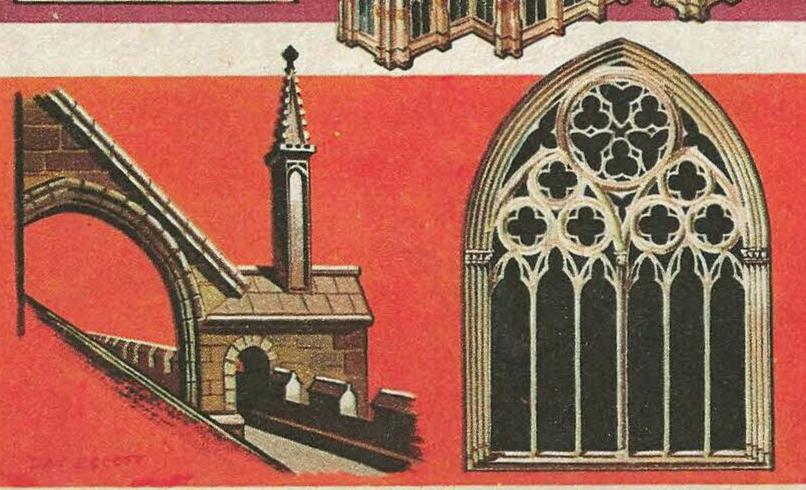




With the Norman invasion of Britain in 1066 Anglo-Saxon architecture disappeared. Architects came with William the Conqueror from Normandy and gave this name to the new style of architecture. France still has a number of fine Norman buildings, such as this church of Notre Dame in Poitiers, which has a magnificent west front. The main characteristics of Norman design are the small windows and great, heavy columns for supporting the roof. Many of the rounded doors have beautifully-carved arches and portals.



Perhaps the most magnificent church architecture existing today is that of the "Early English" Gothic period. The architects of the thirteenth century ignored the lavish carving which had been one of the main points of Norman architecture and concentrated on simple designs. These can be seen in Salisbury Cathedral, one of the best examples of this period. Built in the form of a cross, most cathedrals and abbeys face from east to west, the altar being erected to face the Holy Land. Slim arched windows and graceful capitals were used during this period.



"Early English" Gothic design was followed by another Gothic style called the "Decorated" which, as the name suggests, was more lavish in design than the noble simplicity of the "Early English" style. Larger windows let in more light, but weakened the walls. To strengthen the walls, the weight of the roof was transferred by great arches to supports called "flying buttresses," like the one which can be seen here. Stained glass was used in the windows to give colour to the interior.

LOOK AND LEARN

With his white front, black wings and scarlet triangular bill, the Puffin is a beautiful sight as he soars above the waves. He is seen only rarely in Britain, but in summer is found occasionally nesting in the remote islands of Wales and Scotland. More often he flies much farther north to nest, to the lonely islands of the Arctic, where the summer sun brings a little warmth to the icy wilderness. In the winter he flies south to the warm Mediterranean. However, there is one place in England where the Puffin has made his home—tiny Lundy Island, off the coastof North Devon

Photo by John Barlee

FMGUS

The World's Sea Birds in Pictures

WINGS OVER OVER WATER

THE SPARROW pecking at crumbs on the lawn, the blackbird singing in a tree, the robin with its breast glowing red against the snow—these are the birds that most people know.

But the sea birds have a more remote and mystic quality, even to people who live on the coast. They often nest on lonely, inaccessible places; they show uncanny skill in snatching their food from the turbulent sea. The young are sometimes left to fend entirely for themselves before they can fly, and in ways we do not understand, they show an uncanny instinct for survival. Among the sea birds, too, you will find some of the largest of the bird family.

FOCUS this week brings you photographs of the birds of the sea—many of them taken after perilous climbs over rocky headlands, and hours of patient waiting. With each photograph there are facts which will help you to understand a little more about the birds who wing their way over the ocean.

FOCUS

WINGS OVER WATER

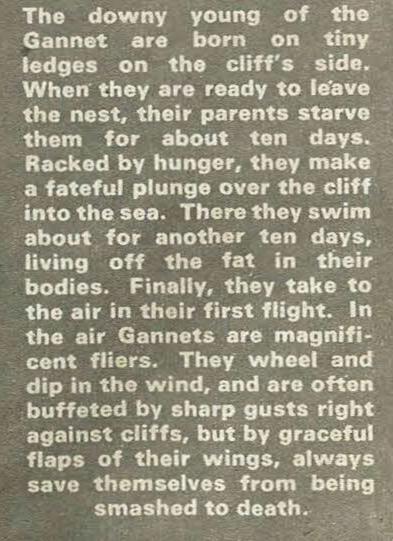
Hated by fishermen, because it steals their fish, the Cormorant flies low over the water until it spots a school of fish. Landing quickly on the water, it plunges suddenly under the surface and chases after the fish, swimming with powerful strokes of its webbed feet and strong wings. In one season a colony of nesting Cormorants is quite capable of removing from the sea around the nets one-tenth of the fishermen's total catch.

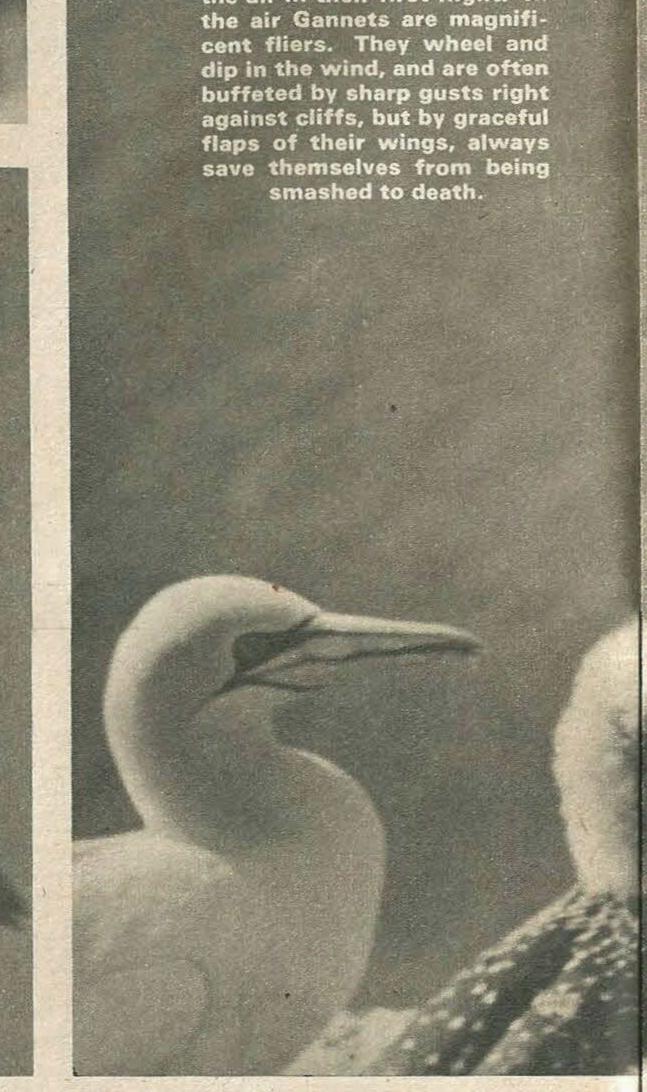
While more and more birds are disappearing from England, the Black-tailed Godwit is making a welcome return to our shores. Though it is still relatively uncommon, several birds have been known to winter here, though they rarely nest. The Godwit is a bird of passage, for ever flying across the seas. It is a wader, as you can see from its long spindly legs. It stalks the shallow waters of estuaries for shellfish and sandworms.

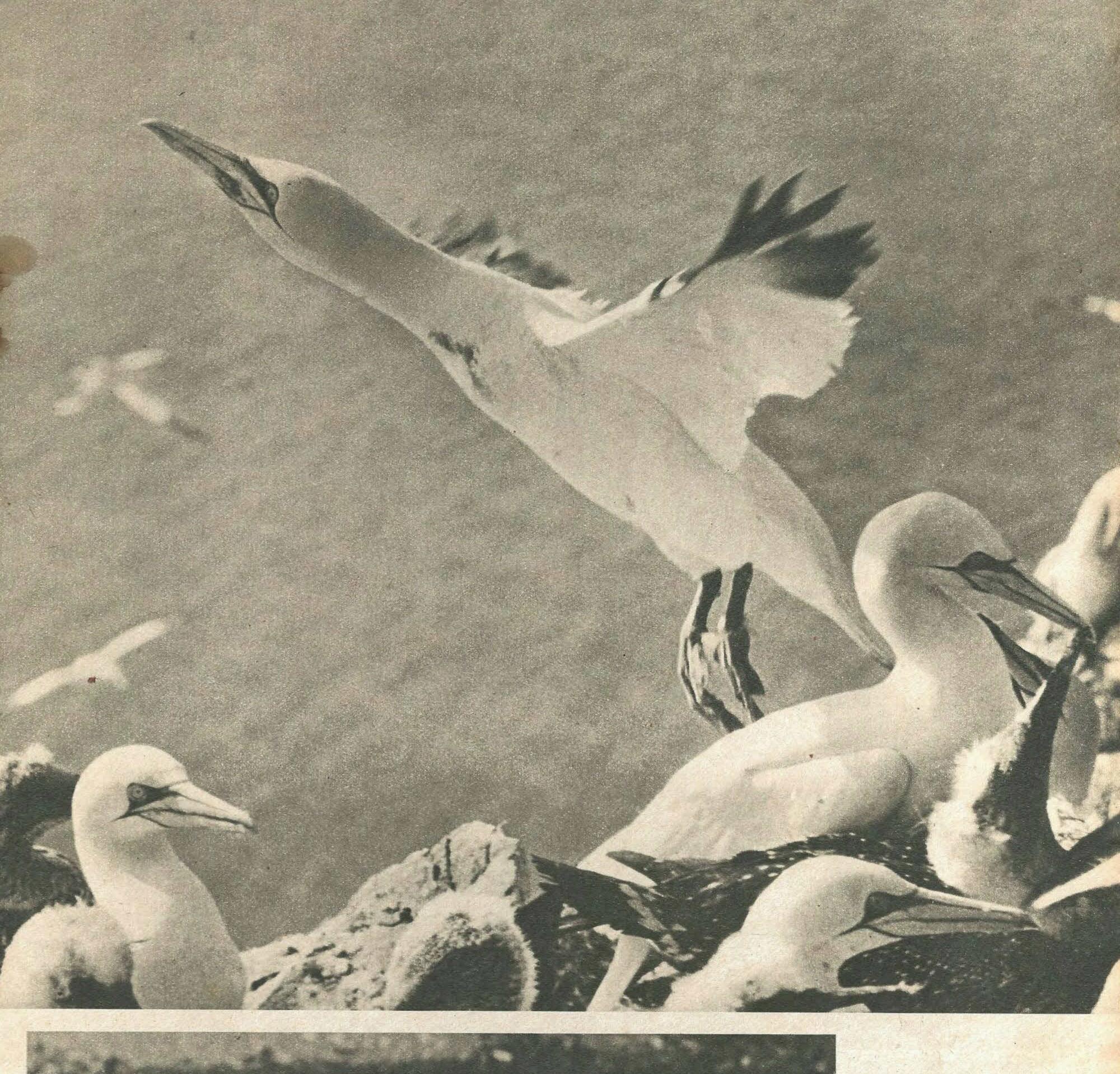
Photo: Eric Hosking

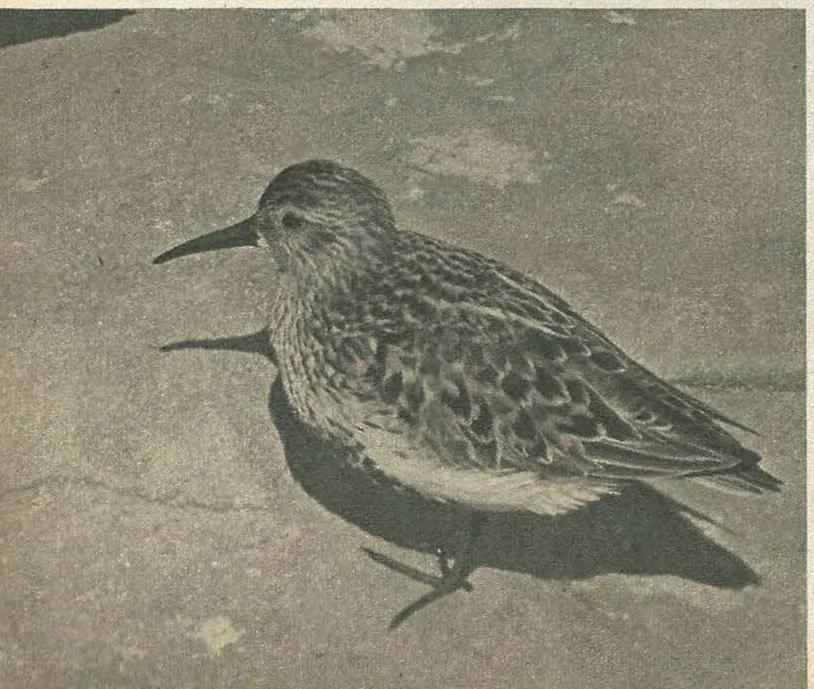








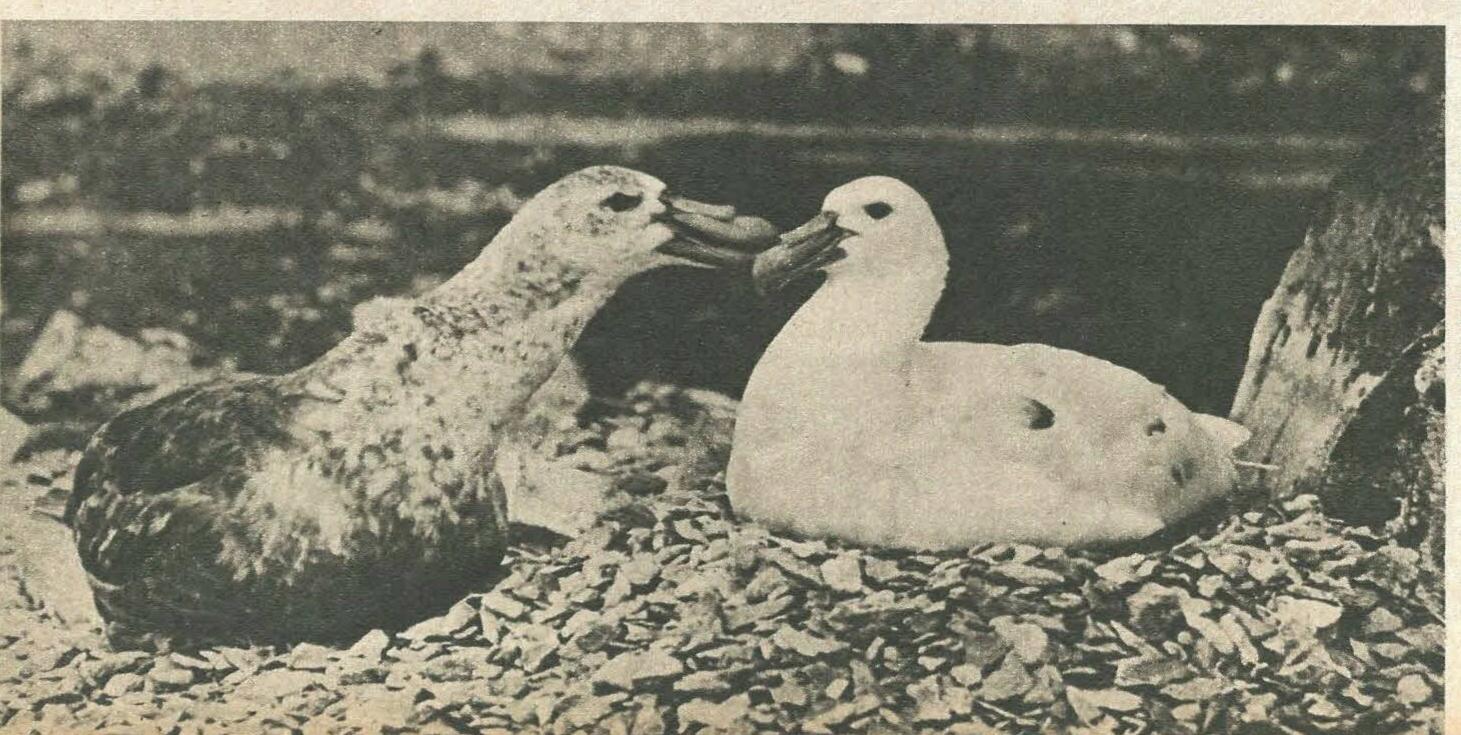




The soft twittering Dunlin is our commonest wader. It comes to England in both summer and winter but spends many months out at sea. In the air the Dunlin flies in flocks, often performing the most remarkable flight formations and appearing like wisps of smoke blown by a strong wind.

Sometimes called "the vulture of the seas," the Antarctic Skua is the fiercest and also the most courageous of the sea birds. It will attack other birds and their nests indiscriminately, but it will also defend its own nests against all attackers. Here a Skua shrieks defiance at an enemy that has unwittingly strayed too near her young.





This photograph of a pair of nesting Giant Petrels shows how their markings vary, from pure white to dappled grey. In contrast to this peaceful moment is the one when a fishing boat throws overboard the waste parts of the catch, for then the birds fight fiercely for the scraps, gorging themselves so completely that afterwards they are unable to leave the surface of the water, but remain heavy and inert for several hours.



LOOK and LEARN FOCUS WINGS OVER OVER WATER

HE Redshank lives in the British Isles and builds its nest in the marshes. It lays four eggs and feeds on small water-creatures like shrimps. Unlike the Redshank, the Greenshank migrates, or flies to warmer countries in winter. It is easily distinguishable by its olive-green legs and it nests only in North Scotland.

North Scotland.

The larger 24-inch long Herring Gull is twice the size of the Shanks and is a resident in Britain. It haunts the coast and builds its nest on cliffs. Largest of the gull family is the Great Black-Backed Gull, which attacks other

birds and eats their eggs.

No other wading bird has such a striking, up-curved bill as the Avocet, a former summer visitor to Britain. Its breeding ground was in Norfolk, where people made puddings from its

eggs.

The Common Tern is smaller than a gull and builds its nest in marshland colonies called terneries. Another marsh bird, the 23-inch

long Curlew, nests among clumps of rushes. It is particularly noted for its curving beak and strange, musical cry.

The Oyster Catcher is a handsome bird found

The Oyster Catcher is a handsome bird found chiefly on the west coast. It eats shellfish and even builds its nest of egg-shells. The Turnstone is a winter visitor to Great Britain, wad-

ing in pools and turning over stones for food.

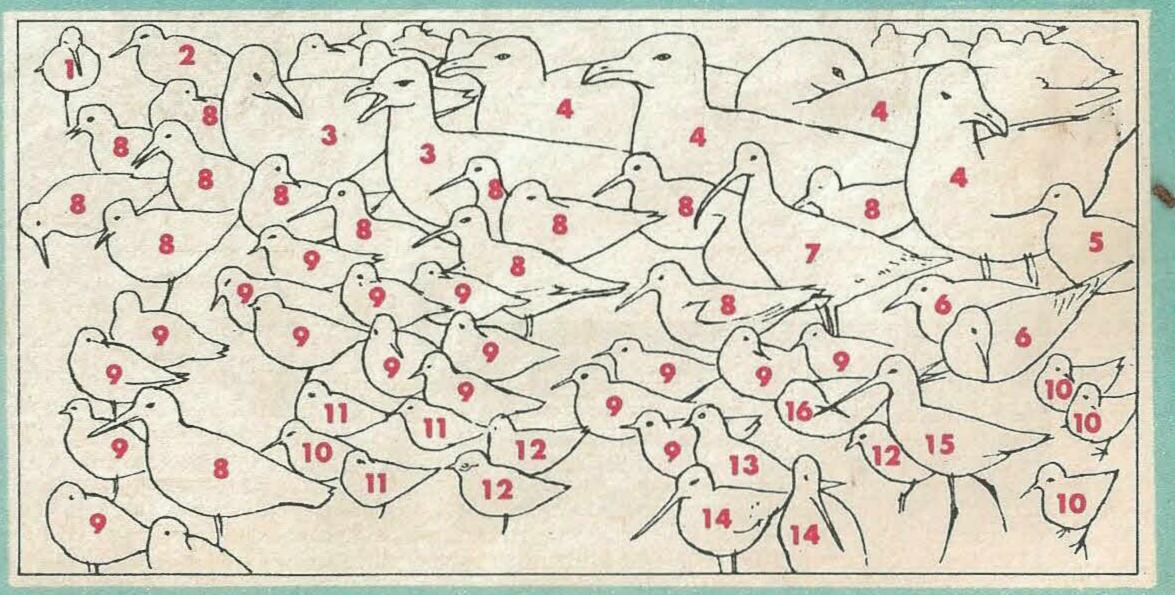
The Dunlin, which also swims in search of food, is the most common wader. Dunlins are found in flocks which build their nests on moors. Similar to the Dunlin but smaller is the Little Stint. The prettiest wader is the Ringed Plover, which nests in ridges of sand or pebbles. The Grey or Silver Plover only visits Britain in the winter

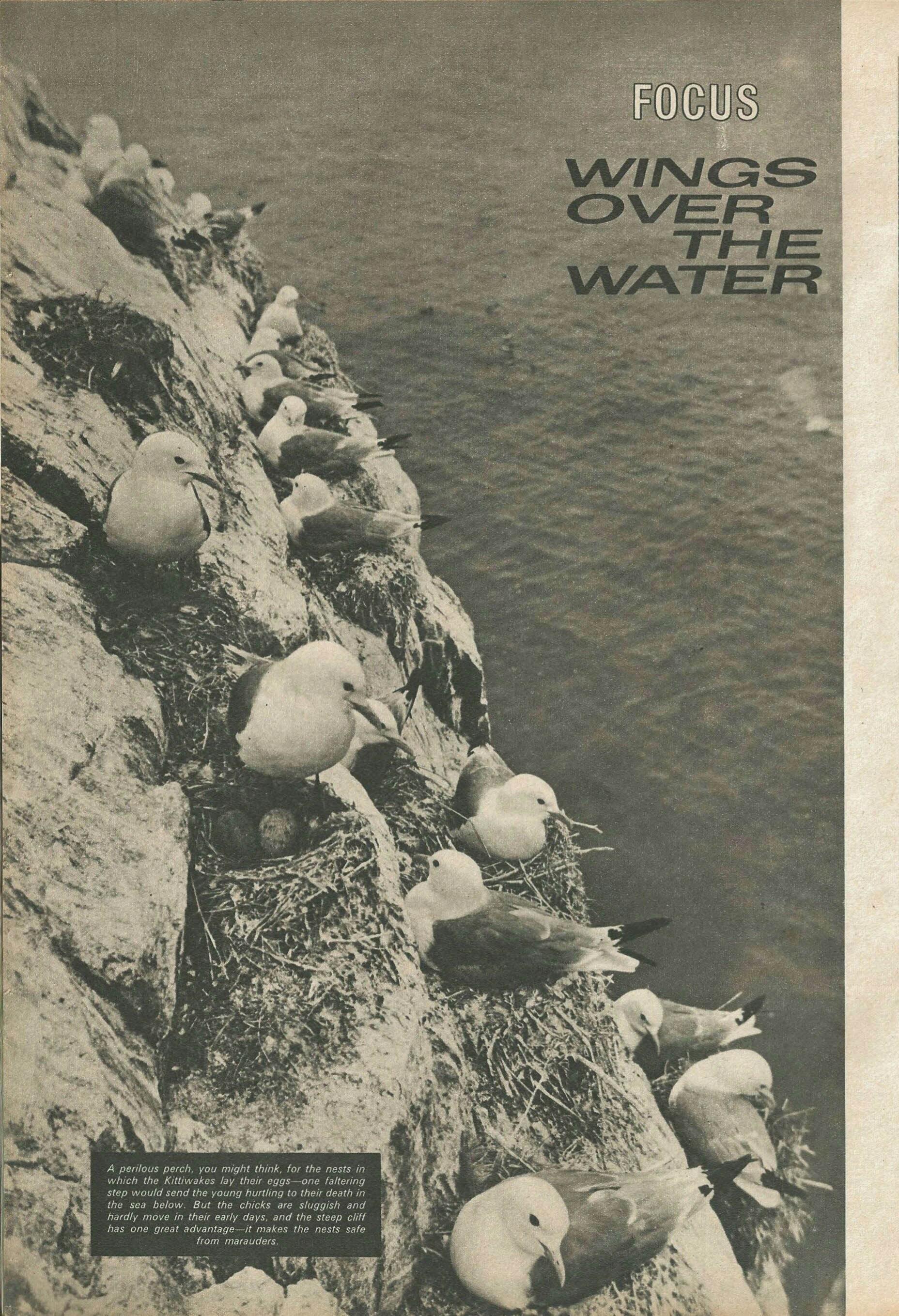
A bigger wader is the Bar-Tailed Godwit which visits shores and estuaries. The Black-Tailed Godwit is another migrant, with longer legs and white-marked wings.

The Little Tern is the smallest of the breeding

The Little Tern is the smallest of the breed Terns and lays its eggs in the sand.

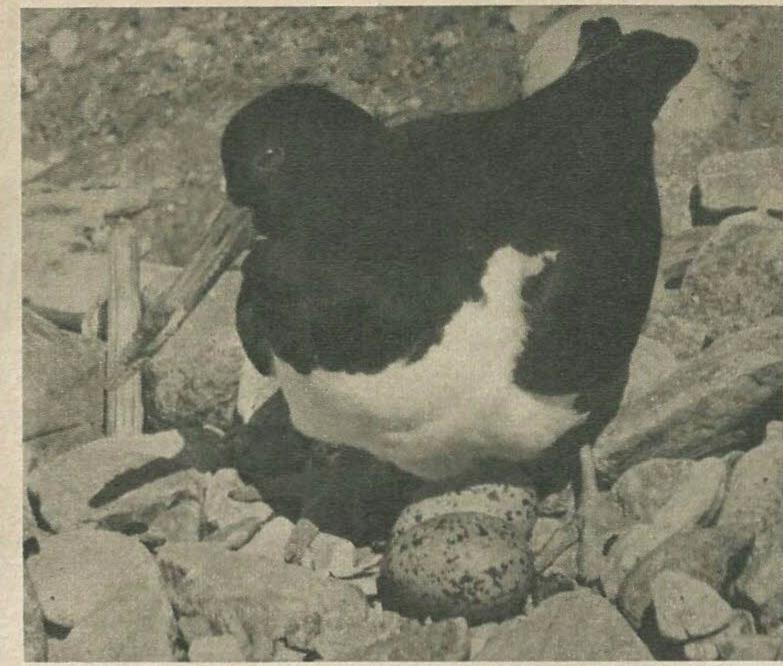
And the second		
	Redshank	3 Turnstone
1	2 Greenshank	1 Dunlin
	Herring Gull	Little Stint
1	Great Black-Backed Gull	Ringed Plover
	Avocet	Grey Plover
	Common Tern	Bar-Tailed Godwit
	Curlew	Black-Tailed Godwi
	Oyster Catcher	Little Tern







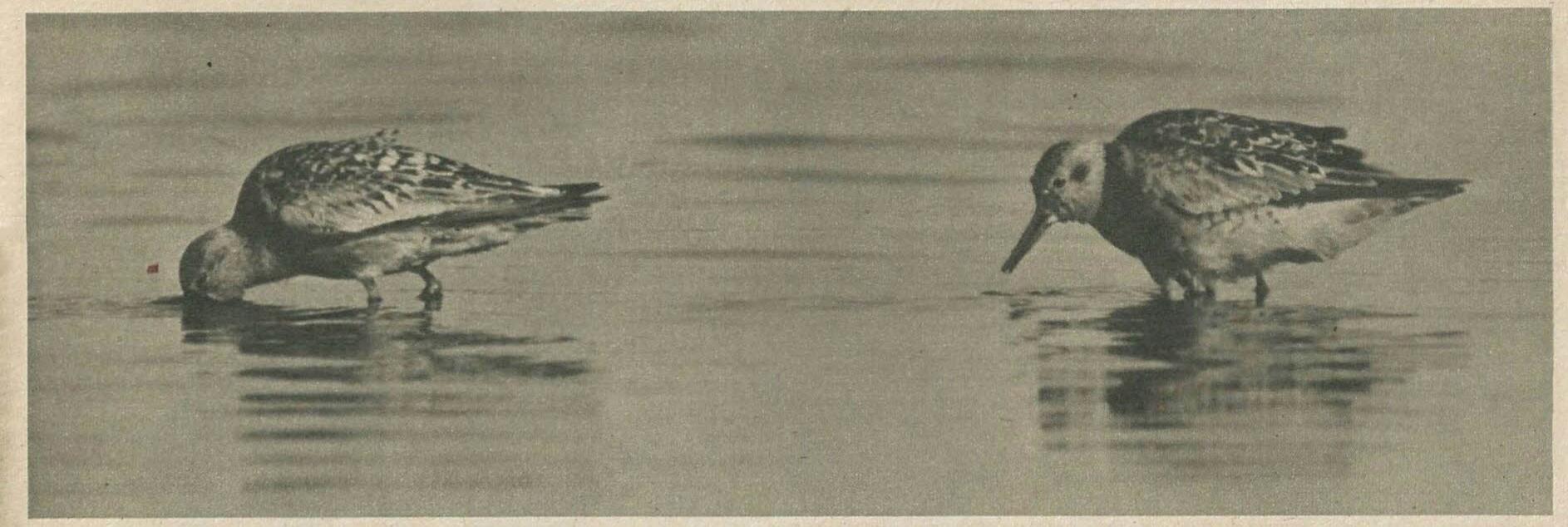
The Blackheaded Gull follows fishing boats for miles along the coast ready to pounce on scraps thrown overboard when fish are being gutted. This gull has an evil reputation for eating other birds' eggs, and attacking young lambs.



We now know that the Oyster-catcher does not usually feed on oysters, as its name suggests, but eats mainly limpets, winkles and crabs, which it picks up from the shallow water in muddy estuaries. Its spade-like beak is used for prizing the shells open. The eggs are speckled and match the shingle on which they are laid, so that they are not easily seen.

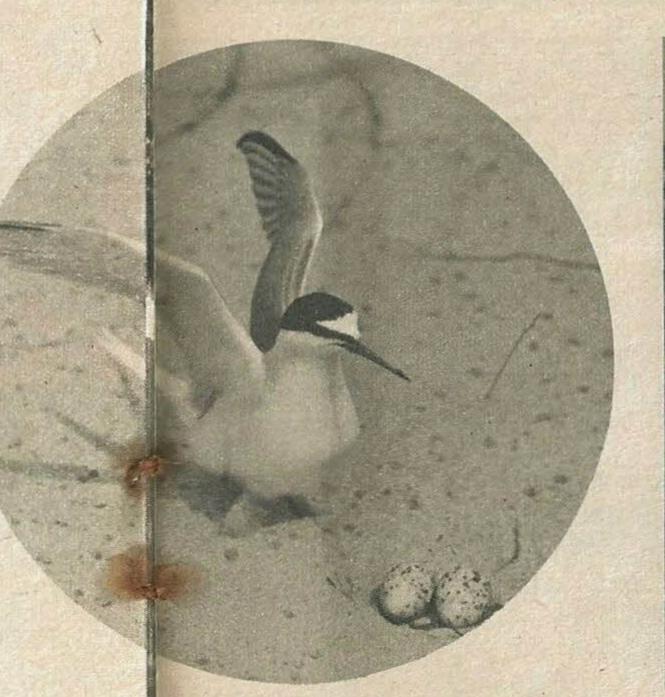


The Green or Crested Cormorant is a mighty fisherman. His streamlined body and powerful legs with outsize webbed feet set far back fit him admirably for catching his prey under the water. In the Far East cormorants are trained to catch fish and bring them back to their owners



The Knot is seen here in its summer plumage of reddish-chestnut feathers. In winter it often visits England, but by this time it has moulted and grown a new grey plumage. The Knot is a wader, and it usually flocks in large numbers, as it

likes company. Stalking along on olive-green legs, it stabs the water with its beak, picking up little shellfish or sea-worms lying embedded in the mud. It does not nest in this country.



The Little Tern is an extraordinary flier, and indulges in all sorts of air acrobatics, turning and wheeling without effort. When nesting it is quite aggressive, and if any man steps too near the young, the Tern will fly at him and beat him about the head with its wings.



The Wandering Albatross is the king of the sea birds, with a wing span of about eleven feet. It can fly effortlessly for hours on end with a smooth gliding motion, and can even sleep while in flight. But though an excellent flier, it can only take off from the water with difficulty, and has to run along a wave on its short legs in order to get up enough speed to launch itself into the air.



Razorbilled Auks are sometimes called "the Penguins of the north" because of their resemblance to the birds that live in the Antarctic. But unlike the Penguins, the Razorbills are great fliers, and are easily identified by the clear white line that runs from their bills to their eyes. They are excellent divers and can plunge from the air down to considerable depths in the ocean, where they search for fish and crabs under the surface. These birds are the nearest living relatives to the Great Auk, which is now extinct.



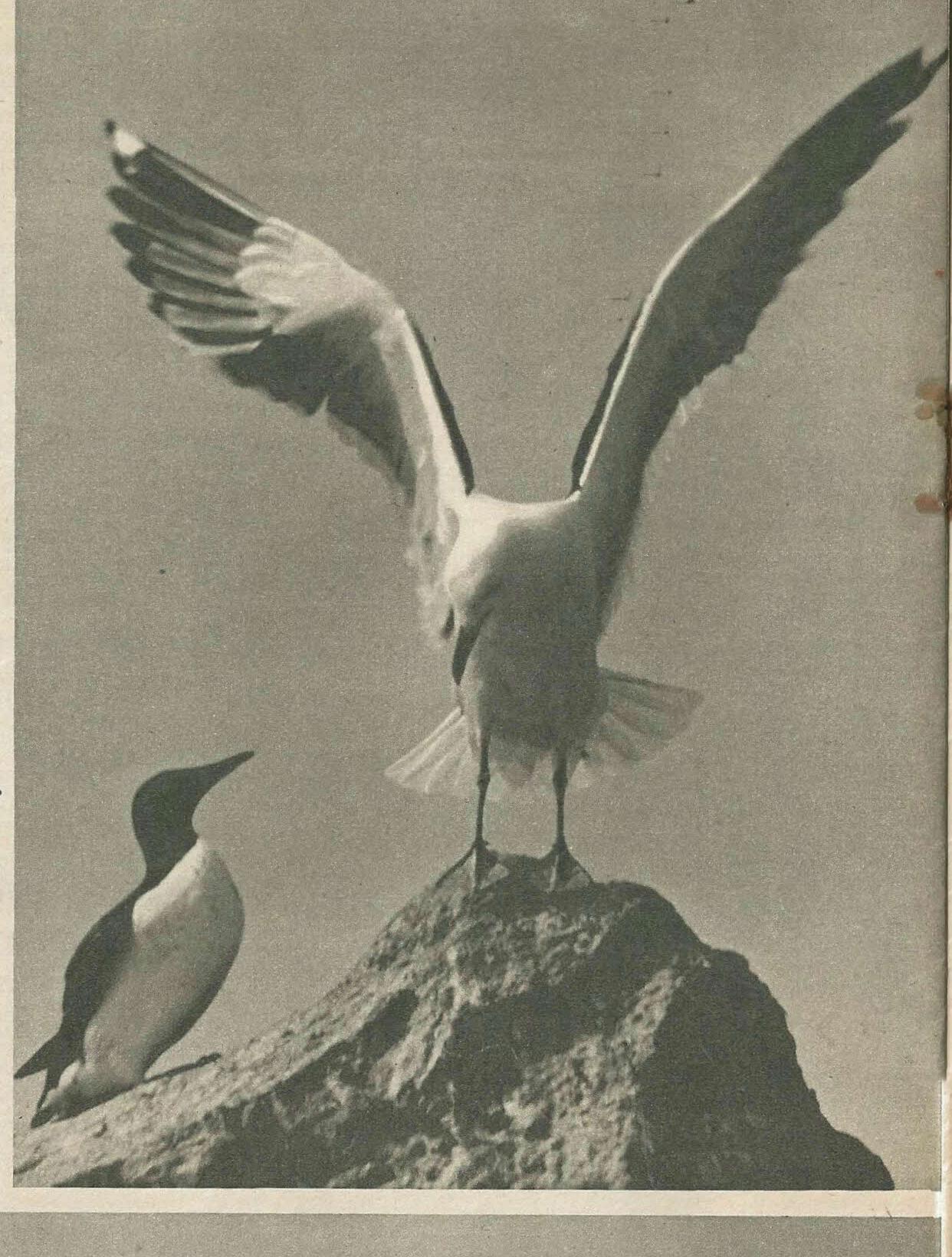
Heading south, this Fulmar has left behind its young chick on one of the lonely Arctic Islands. Unable to fly, the baby plunges into the sea and swims about until it is ready to take to the air. It somehow manages to find its way south, and the following year returns to the island. How it does this is a mystery.

FOCUS

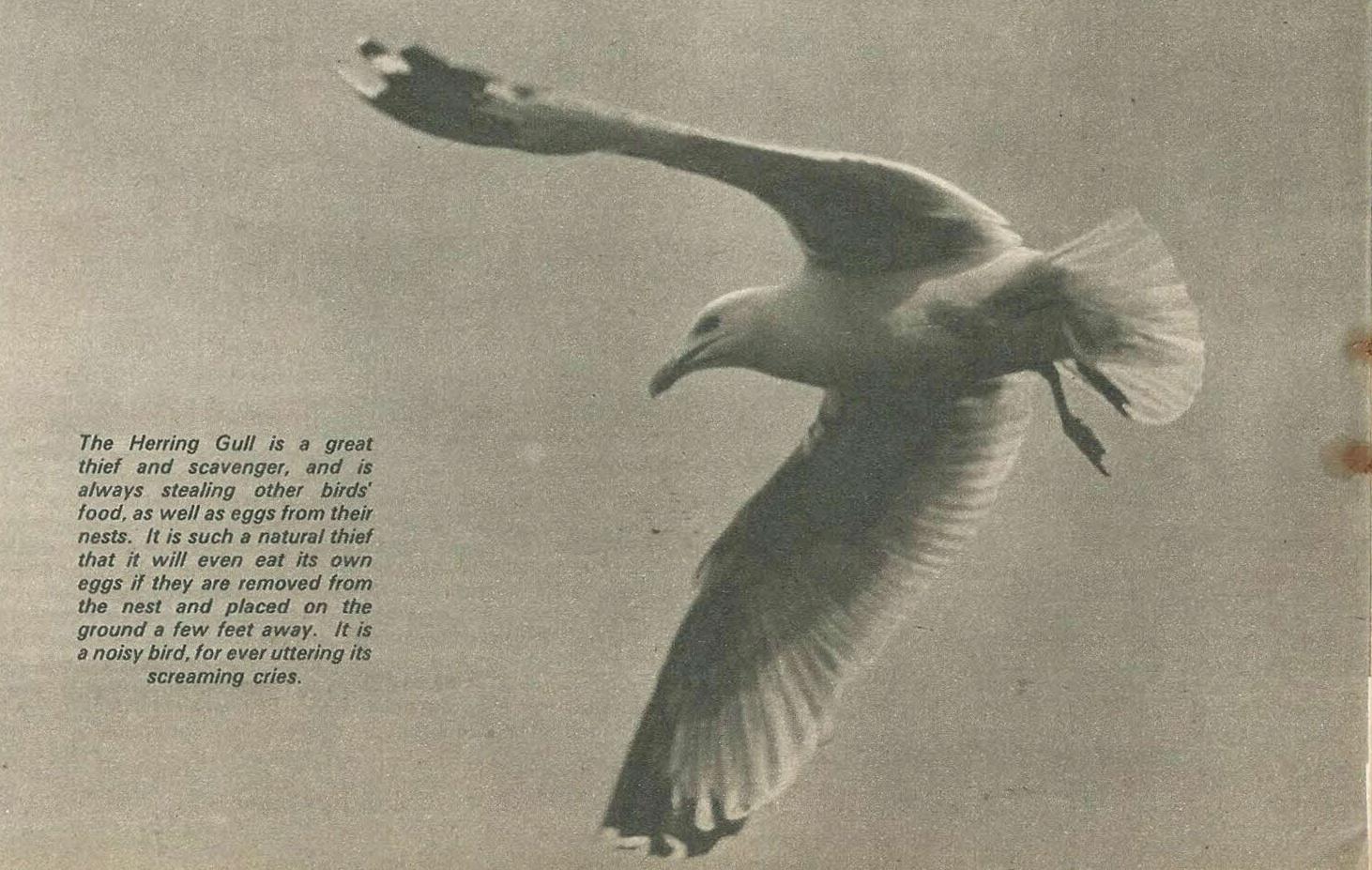
WINGS OVER OVER WATER



On the left-hand side of this photograph is a Guillemot, an ocean bird that spends most of its time at sea, coming to land only when it is nesting or when there is a storm. This bird is often a victim of the oil dumped into the sea by ships, and which clogs the feathers so much that the birds are quite unable to fly. Coming to land is a Lesser Black-backed Gull, a cousin of the Herring Gull shown below.

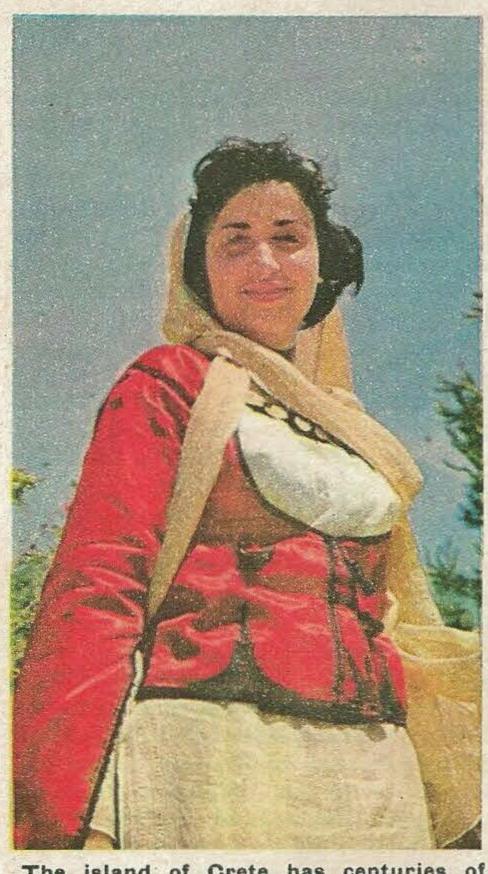


The Arctic Tern is famous for spending more time in the day-light than any other living creature. Nesting in the Arctic during the summer months, when the sun shines all day so that it is never dark, it sets out for the Antarctic when winter comes, and arrives there in time to enjoy the long days and the continuous daylight of the Antarctic mid-summer. It always returns to the same island to nest.



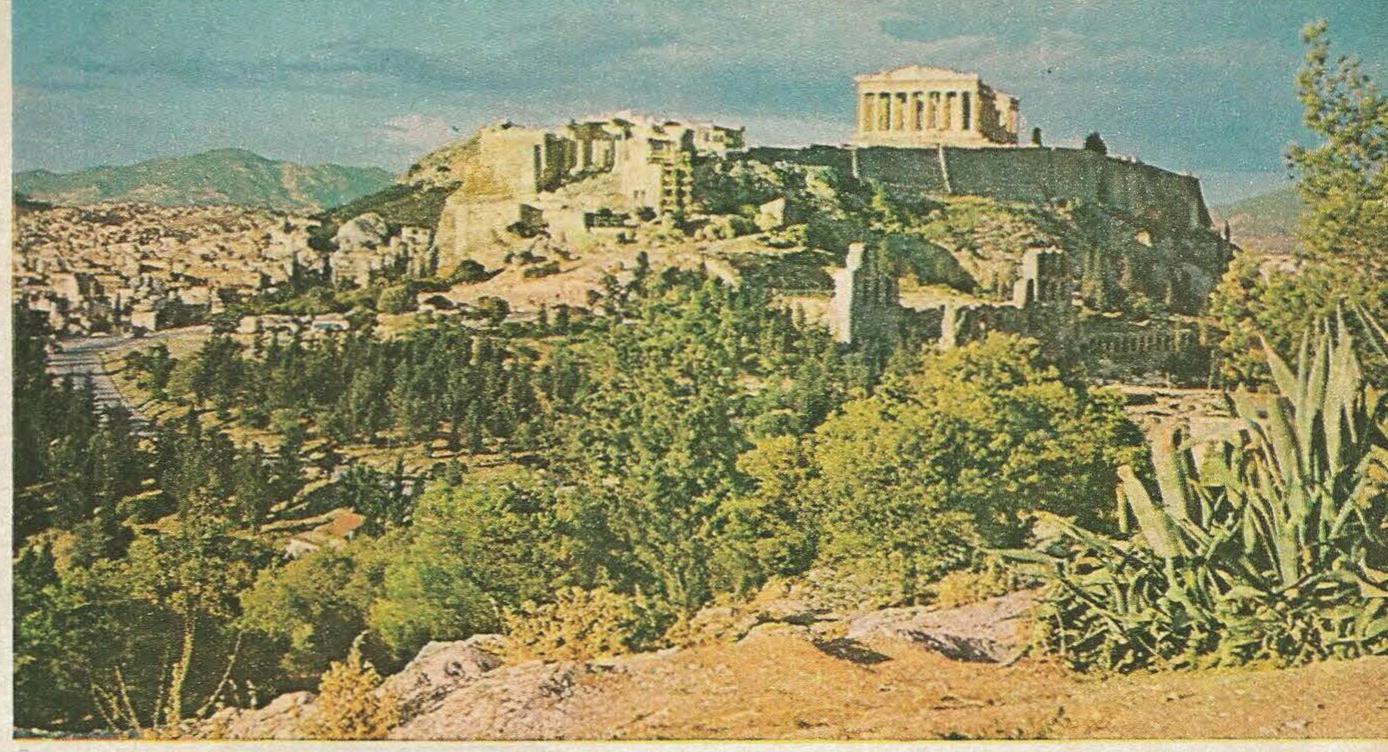
OUR COLOUR CAMERA LOOKS AT GREECE

REECE was the birthplace of civilization. From its philosophers developed modern science, from its law-makers and politicians came the foundations of western law and democracy, and from its artists the principles of European art. Today, Greece is much bigger than ancient Greece. It is almost the same size as England and has a population of less than eight million, scarcely that of Greater London. Two-thirds of the people live in the country and are mainly farmers. They are a tough, hard-working, intelligent people, leading simple lives.



The island of Crete has centuries of culture and romantic history. At one time it belonged to Egypt, then to Turkey. In 1913 it was ceded to Greece. This Cretan girl is wearing national costume.

The LAND WHERE LEARNING BEGAR



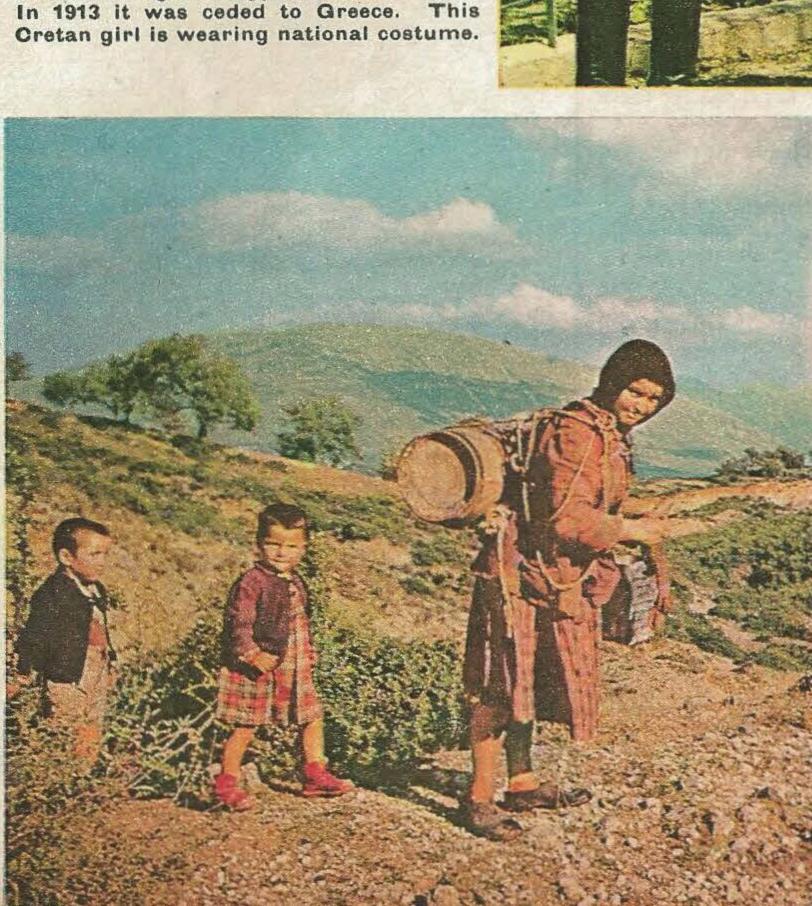


As the sunlight gleams on the remains of the Parthenon, we see behind it Mount Pantelikon, whose marble quarries provided the building materials and which are still used for some of the modern buildings of Athens.

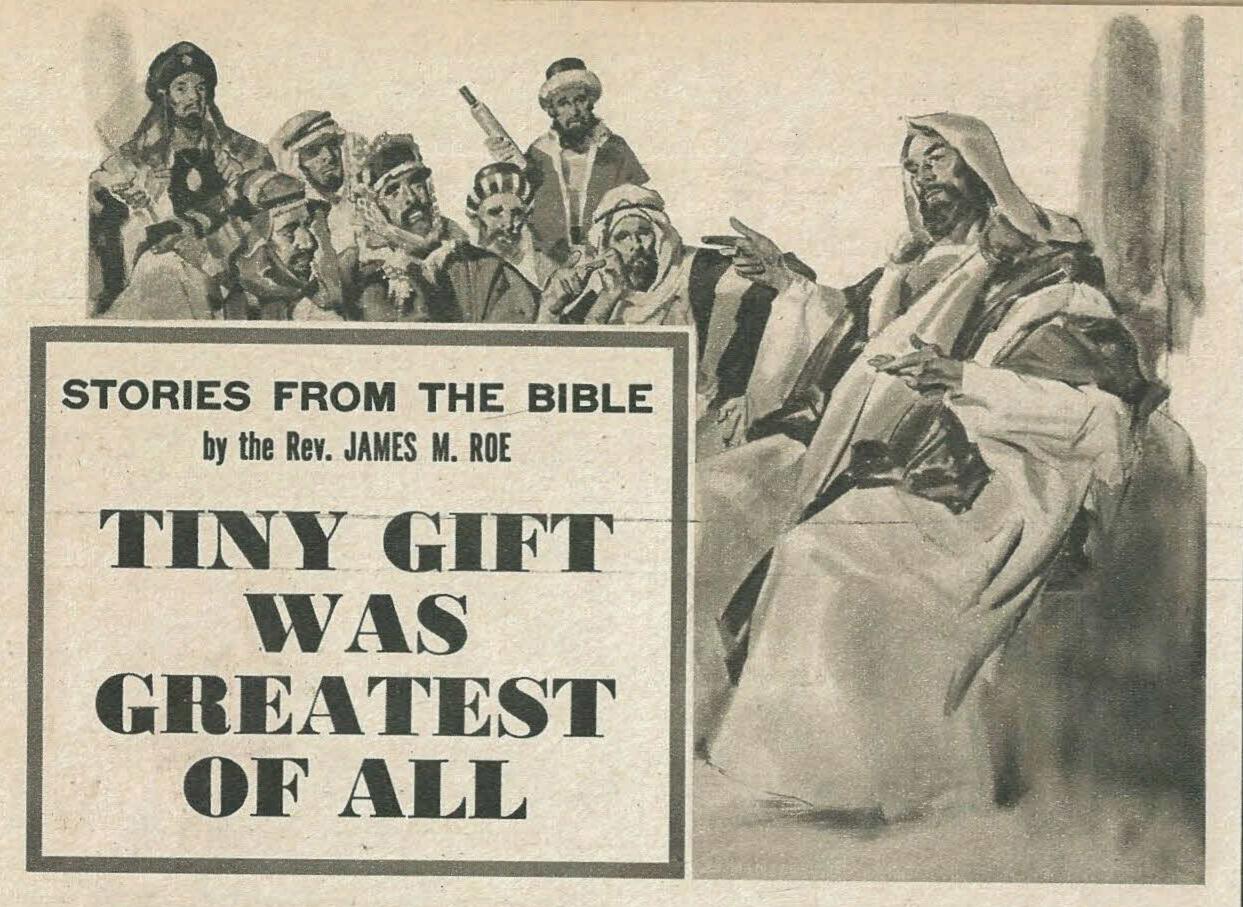


Hardly any of the Greek villages have running water, and the water carrying is always done by women. But even though this one has made a long journey with the water barrel, she also knits as she climbs the stony paths.

Many things may change as the centuries go by, but these men are engaged in the ageold occupation of mending their nets before setting off once again for the fishing grounds.







TESUS had loved the great temple at Jerusalem ever since His first visit to it when He was twelve years old. Often He chose its outer court as a place in which to teach. Like other Jewish teachers or rabbis, He gathered a little group of eager listeners around Him, and taught them either from the Old Testament or by simple stories of country life.

Not everything that Jesus saw happening in the temple pleased Him. He did not like all the shopkeeping that went on around its porches. He did not like the custom, which many people followed, of using it as a short-cut from one part of the city to another. Most of all, He hated the pretence and the pride which were shown by some of the people who came to pay their vows and say their prayers. Far too many of them, He once remarked, were only anxious that other people should see them at their devotions, and admire them for their piety.

The same thought doubtless was in His mind when Jesus was seated with His disciples one day in a place from which they could look across to a part of the temple known as the Treasury. This consisted of a series of collecting boxes, placed in such a position that visitors could throw

> coins into them as they passed. Each had a notice which said what the gifts put in it would be used for. Jesus watched as a group of men passed that way. Each of them was richly dressed, and everything about

them suggested that they were not only wealthy, but also pompous and disdainful. As they entered The old woman threw two small coins into the box. It was all

Jesus and His disciples watched the rich men fling their coins into the Temple collecting boxes. But the real act of charity

the court they brushed past a frail old woman who was also making her way there.

was yet to come . . .

In front of the Treasury the rich men paused and after a short consultation, each drew a bag of coins from the fold of his robe, undid the leather thong which fastened it, and emptied a whole shower of coins into one of the boxes. The clatter of so much money attracted the attention of all the passers by, and also of the disciples who were beside Jesus. With a careless laugh the bags were flung aside, and the men passed on.

Widow's Mite

THEN the old lady approached. Fumbling in her ragged garments, she produced two small coins. Together they were about a halfpenny of our money. With a trembling hand she let them slip quietly into the nearest box.

"Did you notice her?" said Jesus quietly. "I reality that old widow put in far more than any of the men who have just contributed. They would never miss what they gave. She gave all that she had."

The two coins she gave were called mites. The disciples remembered the words of Jesus, and the "widow's mite" became a term for a real personal sacrifice wherever the story was told in later years.

St. Mark 12, verses 41-44.

WORD OF THE WEEK

CABINET

A CABIN is a little hut or room, from the old English word cabane, small house. To it we have added -et, a diminutive ending, which indicates the small version of anything.

This gives us the word cabinet for a small room or office, and especially a private room

for consultation. In such a room as this, the heads of the various departments of state meet to discuss the nation's business. So the idea has extended to the men themselves, that select group of ministers who govern the country.

In another direction, the meaning has developed from a small room, by way of a closet or cupboard, to a large case for displaying articles of value or beauty. This is often a piece of furniture, which is in itself of fine design.

JIGSAW THAT MAKES

OXBURGHSHIRE is a Scottish border county with more sheep than people: 600,000 sheep, 42,691 people, to be exact.

And the sheep can expect to increase their majority, for Roxburghshire is losing its population slowly. Some go north to the industrial midlands of Scotland, others cross the border to England's industrial

Those who go leave behind them a lovely country of rolling hills, shimmering streams and attractive market towns.

Roxburghshire is an inland county with Northumberland to the south, Berwickshire to the east, Dumfries-shire to the west and Selkirk and Midlothian to the north.

This dangerous geographic position has left its mark through the ages. Roman camps are still identifiable, especially that of Trimontium at Newstead, and border fortresses and keeps, which are known locally as "peels," are dotted about the countryside almost extravagantly.

But many of Roxburghshire's most famous landmarks are in ruins. The abbeys at Melrose, Kelso and Jedburgh were destroyed by the Duke of Somerset in 1544-45. Jedburgh and Roxburgh Castles were dismantled by the Scots themselves in the fifteenth century to stop the English getting them. James II of Scotland was killed at the siege of Roxburgh Castle.

Sir Walter Scott, whose famous home, Abbotsford, is near Melrose, once said that as he stood on the top of the Eilden Hills he could see "forty-three places of war and verse." And the legends of verse play as important a part in the county's history as those of war.

This may be "Scott Country," but it is also Thomas the Rhymer country, that thirteenthcentury border poet and seer, who, fable has it, predicted the death of King Alexander III of Scotland, the Battle of Bannockburn, and the union of England and Scotland under James VI. If indeed he did, he was well worth believing. But then the borderers are known to love superstition.

Oakwood Tower was the home of Michael Scott, a "wizard" who lived in the thirteenth century. He was a man who studied magic and philosophy and so impressed the simple people

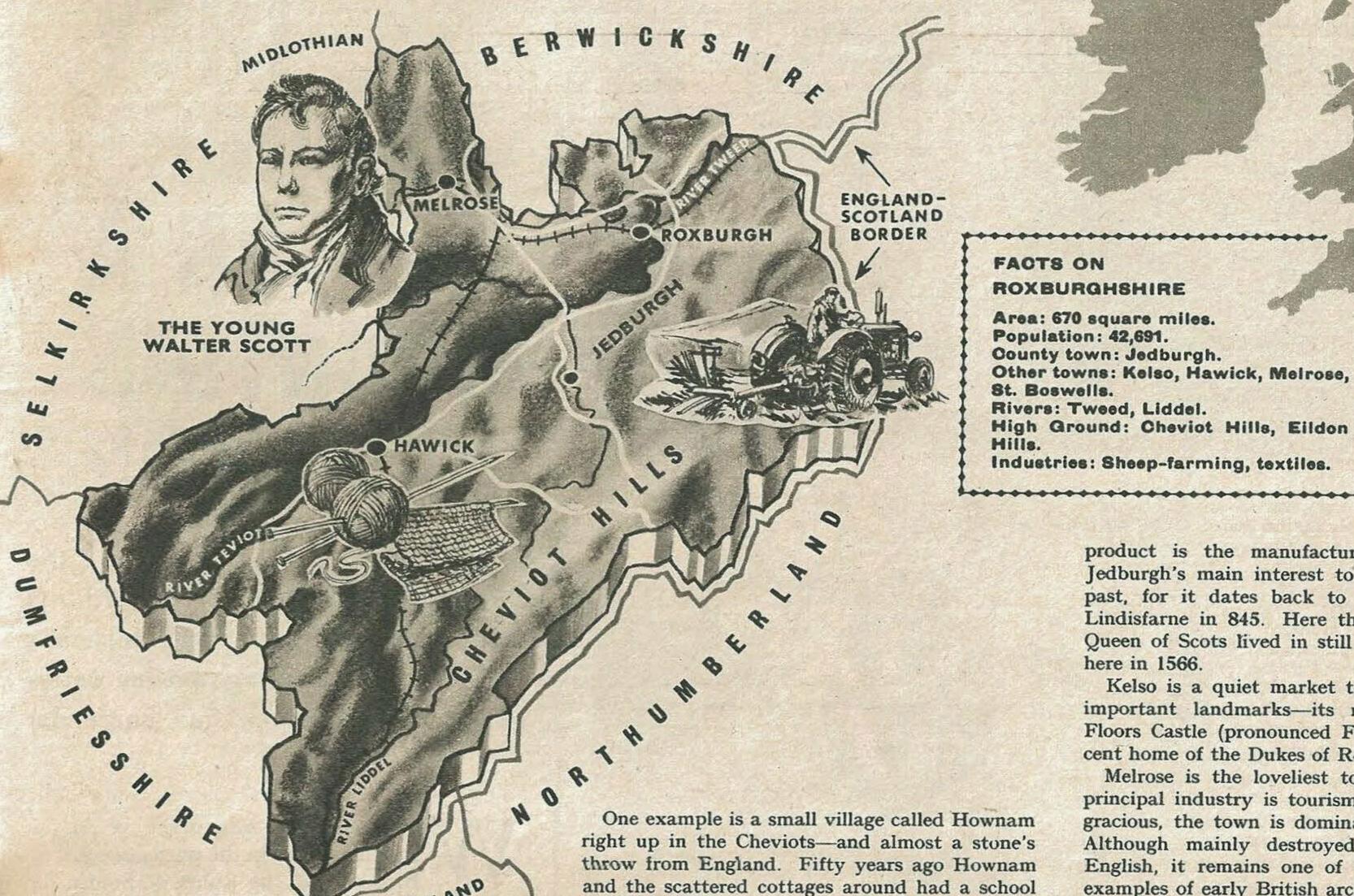


At the siege of Roxburgh Castle in 1460 King James II was killed when a cannon burst.

THE BRITISH ISLES - ROXBURGHSHIRE

MORE SHEEP THAN PEOPLE!

Roxburghshire has seen much of war. Today its border fortresses are deserted and sheep, outnumbering the people 14 to 1, have taken over a county where modernization has been slow to come



around that they believed him capable of anything-including the amazing feat of cleaving the Eildon Hills into three.

Admittedly there are three humps on the Eildon Hills-the highest being 1,385 feet-but most people reckon the Eildon Hills had been that way for quite some little time before Michael Scott came along.

Another superstition which was firmly held was that after the marriage of Alexander III in Jedburgh Abbey a ghost appeared at the merrymaking, gliding in and out of the terrified guests. This was taken as an omen of disaster-and true, the King did die at Kinghorn in Fife a few months later.

But then he did not really stand a chance with a ghost and Thomas the Rhymer lined up against him!

For a county covering an area of 670 square miles, Roxburghshire has few big towns-and no major cities at all. Thirty per cent of the male population work on the land. Many are tenant farmers, in many cases renting their land from the Duke of Roxburgh, one of the biggest landowners in the county.

Sheep are the principal "product," especially towards the south, where the Cheviot Hills form a barrier between England and Scotland.

Living standards, however, are not very high for the farm workers. In many of the isolated areas there is no electricity, and some cottagers, many of whom have large holdings of around 150 acres, have to walk to the nearby stream to fetch water. Electricity and water is now reeaching most of the more isolated areas-but noot before many people have moved away.

One example is a small village called Hownam throw from England. Fifty years ago Hownam and the scattered cottages around had a school for thirty to forty children, a full-time teacher, a post office and shop, a church with a resident minister and a population of about 150. Even twenty years ago, with running water, but no electricity, the population was just over the one hundred mark, and a bus service three times

Gipsy Capital

a week to the nearest large village, Morebattle,

had been added.

D UT now the school is shut. Children are taken D to Morebattle, five miles away. There is no minister. A neighbouring minister calls each Sunday to preach to the half-dozen to a dozen who turn up. A bus calls only once a week, and the population has slumped to about thirty.

Yetholm, again very nearly in England, is one of the prettiest villages in the county. It is split into two, one half being called Town Yetholm, the other Kirk Yetholm. Kirk Yetholm used to be, and still is to some extent, the headquarters of gipsies. A cottage still remains in the village known as the "Romany Palace," and it was here that the gipsy Kings and Queens used to live. Now the cottage is no longer owned by the gipsies, but Yetholm still gets many gipsy bands visiting their former "capital."

Of the towns in Roxburghshire, Hawick is the largest, and the main industrial centre. Mills manufacturing woollen cloth fill the atmosphere with smoke. Hosiery and knitwear from Hawick are exported all over the world. In fact, the textile industry employs nearly twenty per cent of the men in the county and forty per cent of the women.

Jedburgh, with its famous Abbey ruins, is the county town, but it has little industry. Its main product is the manufacture of rayon. And Jedburgh's main interest to tourists lies in its past, for it dates back to Ecgred, Bishop of Lindisfarne in 845. Here the house that Mary Queen of Scots lived in still remains; she came here in 1566.

Kelso is a quiet market town with only two important landmarks-its ruined Abbey and Floors Castle (pronounced Fleurs), the magnificent home of the Dukes of Roxburgh.

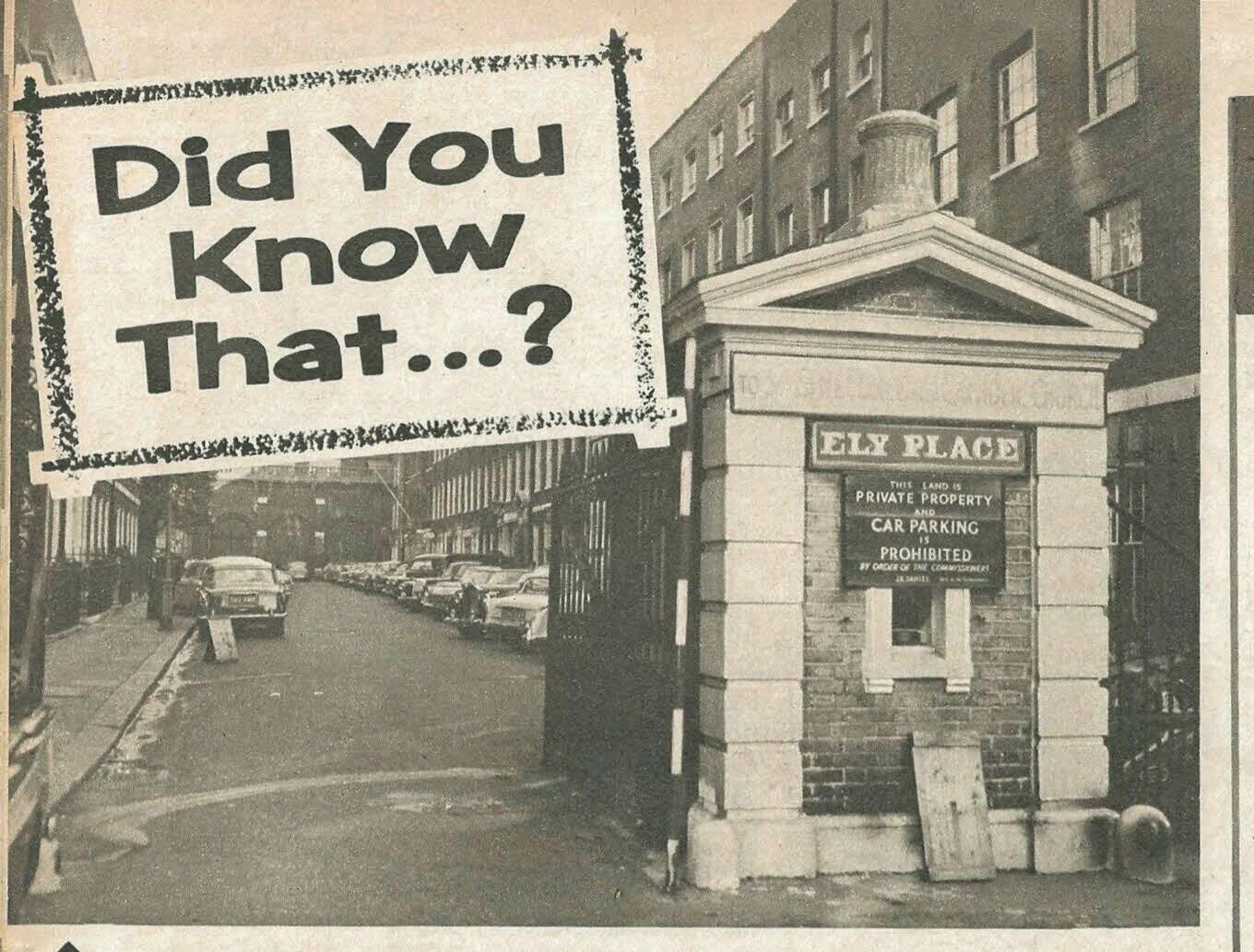
Melrose is the loveliest town of all, and its principal industry is tourism. Grey-stoned and gracious, the town is dominated by the abbey. Although mainly destroyed in 1545 by the English, it remains one of the most beautiful examples of early British architecture.

Here Robert Bruce's heart is buried. The tomb of Alexander II and of his wife, Joanna, sister of Henry III of England is here, too.

The thousands who explore the soft border country each summer usually make their headquarters at Melrose. And most come away enchanted by the peace and rolling beauty of this county which has seen so much war, and yet seems so undisturbed by it.

Roxburgh countrymen of the thirteenth century believed that Michael Scott was a wizard with fantastic powers.





... Ely Place, in Holborn, London, was once part of Cambridgeshire? In the thirteenth century the bishops of Ely had a splendid palace, with a beautiful garden, referred to in Shakespeare's Richard the Third in this way: "My lord of Ely, when I was last in Holborn I saw good strawberries in your garden there." While the Bishop's Palace stood, the ground was regarded as part of the See of Cambridge. An Act of Parliament in the eighteenth century made Ely Place a part of London.



... two-winged flies have a pair of balancers, or halteres, to steady their flight. Our picture shows the fore body of a Crane-fly greatly enlarged, and you can see the halteres like knobs at the end of a pair of rods. If these balancers should become damaged, the fly has great difficulty in making a steady flight. There

... the Sphinx, near the Great Pyramid in Egypt, once had to have its chin propped up. During the last war the great barrage of the guns of Alamein caused such ground vibration that it was feared that the head would be shaken off. It was propped up with sandbags. This was not the first time that war had affected the Sphinx, for its broken nose is reckoned to have been caused by the guns of Napoleon in

originated in the days when men carried swords. The weapon was naturally carried in the right hand, so a handshake was regarded as a

... the custom of shaking hands sign of goodwill.



INTO BATTLE

The Story of the Zulu War Part Three

THEY FOUGHT MOUNTAIN TOP

Brilliant battle tactics turned the tide of the Zulu War in Britain's favour. Courage, too, was a necessity -for this was a savage enemy determined to die rather than surrender

HEN we look at some of the events that happened in the war between Britain and the Zulus of South Africa it seems astonishing that it all happened only eighty-four years ago.

The Zulus, ferocious, savage and suicidal in their battle tactics, seem centuries removed from any of the Africans we know today. And after they had routed the British at the battle of Isandhlwana on January 22, 1879, it seems amazing that it was not until thirteen days later that news of the disaster reached England.

The news was conveyed in a dispatch sent by Lord Chelmsford, the British commander, via a steamer to St. Vincent, from where it was telegraphed to London. At once reinforcements were gathered in Britain and a new, fresh army put to sea en route for South Africa.

Meanwhile, Lord Chelmsford's army on the Natal-Zululand frontier contented itself with defence tactics.

Towards the end of March, Lord Chelmsford began re-forming his plans for a new invasion of Zululand. It would start, he decided, with a diversion which one of his five army columns would make in order to attract the attention of the Zulus and draw them off his main invasion force. The place chosen for the diversion was the table-topped Inhlobane mountain, upon which a considerable number of Zulus were camped.

The plan was that Colonel Evelyn Wood would attack the three-mile long mountain with two forces, one at each end. These two forces, each of about six hundred men, were commanded by Lieutenant-Colonel Redvers Buller, later to become one of our greatest soldiers, and Lieutenant-Colonel Russell. Their first task, after setting out from their camp at Kambula,



observed.

The first force to reach the top was Buller's. Using huge boulders of rock for cover, his men opened fire on the surprised Zulus.

At the other end of the mountain, however, things were not going quite so well. Lieutenant-Colonel Russell's force had become stuck on a sheer precipice with alarming results: they were on a lower level than Buller's men at the other end, and they just could not move any higher. And from this exposed point they had spotted in the distance a fast-moving Zulu army marching hot-foot directly towards the camp they had left behind at Kambula.

Everyone on and around the mountain now had a commanding view of what was happening. Colonel Wood, in command of the two forces of Buller and Russell, sent an order to Russell to change his position.

Like everyone else, Buller, too, could see the Zulu army marching apace towards the British camp. On the mountain top the Zulus that his men had been routing only an hour ago were now turning the heat on him. He decided to get off the mountain while he still could.

Unfortunately, by now only one way of retreat down the mountain was left open to him, and that was a precipitous path. Dragging their wounded and grasping their frightened horses, the Britons slithered and slid down the path pursued by the yelling Zulus. Buller himself stood with the British rearguard, rifle in hand, pouring bullets into the pursuers, and it was chiefly due to his courage and example that the Zulus did not catch and annihilate his small British force.

The British forces converged upon their camp at Kambula; this clearly was the place for which the great Zulu army was making.

The British position at Kambula was on a

small redoubts and within circles of wagons called laager. They were slightly more than two thousand strong and they were bristling with readiness for the coming attack on their position.

Zulus Confused

THE Zulu army which appeared in front of this A British position just before midday on March 29 could not have seen a better defended camp. While still out of range of the British artillery they formed up their famous crescent-shape line of attack—the front fallen back, the sides pushed out and ready to come together in a pincer movement around their enemy.

The British answer to this came from Lieutenant Colonels Buller and Russell, the same who had fought the mountain skirmish. Taking a body of mounted men, they rode out to the Zulu right flank and, dismounting, opened fire.

It was a splendid piece of tactics. The Zulus, infuriated by the cheek of this handful of their enemy, broke and charged the Britons. Coolly Buller and Russell remounted their men and retreated speedily to the British lines. They had successfully broken the Zulu ranks, and now as the Zulus came charging forward, the artillery in the British camp blitzed them with shellfire.

On the other side of the battle line the Zulus met with more success. They broke through the British lines and overwhelmed the defenders with their numbers. Then, as they gathered for a final assault, the British counter-attacked with their cavalry and swept the Zulus back.

That counter-attack was the turning point of the battle. Although the Zulus afterwards made charge after charge upon the British camp, the defence held firm and never looked likely to sag again. Sheer fatigue made the Zulu attacks less and less effective and by the end of the afternoon,

with the cream of their warriors mown down by the remorseless British guns, they began to withdraw and then to flee.

A view from one side of the British rectangle, formed as a

defensive position when

our invasion army was attacked

by Zulus outside Kambula. The

fleeing Zulus.

Just as they had hounded the British retreat from Isandhlwana, so now the British cavalry, led by Colonel Buller, went after the Zulus and, with triumphant deliberation, turned the enemy rout into a final slaughter. For seven miles Buller's men rode behind and alongside the Zulus, picking them off with their rifles.

The Zulu King, Cetewayo, never recovered from the slaughter of Kambula. The British never relaxed their grip on their victorious situation and when the reinforcements arrived from England they came not to revive a tottering army but to support a final drive for victory. The army regrouped, and once again the invasion

Hail of Fire

THE opposition this time was poor, and some-I times negligible, until the invaders were nearly at Ulundi, Cetewayo's capital, early in July. Then a hastily-mustered Zulu army barred their way on all sides.

Because there was no immediate cover the British quickly formed a rectangle of men facing outwards towards their attackers. Inside the rectangle Lord Chelmsford placed the cavalry, for the moment held inactive. The Zulus advanced against the rectangle, in their crescentshape line of attack and were met by a hail of fire. Every side of the rectangle was threatened and every side held firm—there was no breaking the British stand. Again the Zulus were slaughtered en masse: when they fell back Lord Chelmsford ordered the rectangle to break to let out the cavalry, and with a great charge the final flower of Zululand was crushed.

Zululand, which had for so long upset the peace of Africa, was conquered. Yet the Zulus had twisted the British lion's tail in a fanatical six months of fighting. Witness the numbers who died in that last battle outside Ulundi: thirteen Britons in the rectangle were killed, while of the 20,000 Zulus ranged against them fifteen hundred





A party of pilgrims on the way to Canterbury stopped for a meal at the Tabard Inn at Southwark.

THE ARTS—This Week: The Canterbury Tales

POET WHO SPIED RENGLAND

When Geoffrey Chaucer, author of the immortal Canterbury Tales, went on a secret mission he was well rewarded. The King was so grateful that he awarded him a pension of £13 a year—plus a jug of wine a day!

EOFFREY CHAUCER, England's earliest writer of genius, was also a secret service agent.

He became attached to the court of Edward III in 1370, when he was 30 years old, and the first of many secret missions took him to Italy where he remained for about 11 months.

Apart from the fact that he spent some time in Genoa, Pisa and Florence, almost nothing is known about his work there. But we can assume that some of it was not very far removed from what we call "cloak and dagger" activities.

For he spoke fluent Latin, and could easily have passed himself off as an Italian gentleman. He was also well-trained in the use of arms, having been a soldier at the age of 19, when he had been taken prisoner in France. But a few months later the King had paid his ransomand he had been freed and awarded a life pension of £13.6.8.

The mission to Italy was royally rewarded with the grant of a pitcher of wine daily.

In 1374 Chaucer was made Comptroller of the Customs and Subsidy of Wools, Skins and Leather, for the Port of London. He was good at the job, and apparently the terror of shipping agents who used to engage in large-scale smuggling.

In April, 1377, the smugglers got a breathing space, for Chaucer was sent to France. This is one of the few missions for which we know the reason. His instructions were "to treat for peace with Charles V," the French King.

After Edward III's death in 1377, the new King, Richard II, sent Chaucer on several more adventures overseas, then appointed him Comptroller of the Petty Customs.

Misfortune overtook Chaucer when his patron, John of Gaunt, was in Spain. The King was deprived of all power and a regency of 11 men under the Duke of Gloucester, ruled England. Gloucester hated John of Gaunt, although they were brothers, and his hate naturally took in Gaunt's old friend, Chaucer, who was sacked from his job.

Adversity spurred his writing. And it was about this time, when he was also grief-stricken by the death of his wife, Philippa, that he was composing his greatest work, "The Canterbury Tales."

In 1389, Richard suddenly restored himself to power and Chaucer was appointed Clerk of the King's Works at Westminster at a salary of 2s. a day.

Chaucer learned building quickly, for he apparently erected the stands in Smithfield for the King and Queen to watch a Royal Tournament. He took such an interest in it that he was able to write a very detailed account about how jousting tournaments were conducted.

When the spring came he could never resist the call of the countryside. He put away his books and enjoyed himself, which is probably how he came to meet the pilgrims on their way to Canterbury, and write about them.

Ordinary people had almost never before featured in literary works. Humour, too, filled his pages.

He died in 1400, aged 60, at his cottage in Westminster, almost penniless. But he left riches greater than any other man of his time—the riches of words, simple but profound, containing humour and tragedy.

HOW THE TALES BEGAN

HAUCER is staying at the Tabard Inn at Southwark in London.

It is springtime, when flowers are showing their colours all along the narrow lanes, birds are singing, and devout people are preparing to go on pilgrimages.

From every part of England, these people every year make their way to the religious centre of England-Canterbury. Chaucer is a pilgrim, too—but a lonely one. Until, during the evening, a group arrive at the inn, pausing on the ride to Canterbury.

Chaucer talks to them and is so taken with their companionship that he decides to get up early in the morning and join this little band of pilgrims.

On the way they tell—or rather Chaucer tells for them -their stories. First we hear The Knight's Tale, then The Miller's Tale and so on . . . twenty-three stories, most of them in verse.

They are all works of such depth, ingenuity, humour and humanity that they repay a thousandfold the trouble of looking up the meaning of words, and getting to know his style.

It has been truly said that if you can once get into step with Chaucer and his pilgrims, you will never leave them until they reach Canterbury.

Lines from the Canterbury Tales

These are not the actual words that Chaucer wrote. They are one of several "modernizations" written in the nineteenth century of the poet's old English verses

When droughty March is gone, and April showers

Freshen the earth, and quicken all the flowers,
And little birds upon the budding trees
Wake in the night and sing their melodies, Then, moved by the sweet springtime, folks incline
To go on pilgrimage to some great shrine; And men of all degrees, from end to end Of England, unto Canterbury wend, To pray before the tomb of our great Saint, For peace of soul, or cure of some complaint.

It happened in this season, on a day, In Southwark at the Tabard, as I lay,

municipality in the actual words that Chaucer wrote. They are one one of several "words that Chaucer wrote. They are one one one the nineteenth century of the part of the poet's old English verses

Ready to wend upon my pilgrim route To Canterbury with a heart devout; Ha the incline to that hostelry, Full nine-and-twenty folk in company.

Good pilgrims were they all, I quickly found, Who were, like me, to Canterbury bound; And having spoken unto every one Over the evening meal, I was anon Admitted to their goodly company.

And then the keeper of our hostelry A merry, bright-eyed man, said he would ride At his own cost with us, and be our guide; Saying, we were the merriest pilgrim band That he had seen that year in all the land.

And now, I think, 'tis time to stay my verse, And tell you of my fellow-travellers.

Hand the bear of the company of the poet's old in the season, on a day, In Southwark at the Tabard, as I lay, In Southwark at the Tab

PET TALK

by EDMUND BURKE

TRAINING TIPS

WHEN you start to train any animal the rules are always the same. You show it what you want, time and time and time again—because we cannot communicate directly with any of our pets. For example if you want a dog to sit on command, press it into the sitting position every time you say "Sit," and keep doing it until you need less and less force.

Never, never lose your temper when you are training an animal. If you do you will lose all the ground you have gained, and will have to start all over again.

A cat might be trained the same way, but you need perhaps ten times as much patience, and you cannot be sure of success. This is one of the big differences between cats and dogs.

MIXING THE FISH

IN order to set up a community tank I with small fish under three inches long, I would use one male Siamese, a pair of Guppies, a pair of Glowlights and one or two pairs of Tetras.

You must remember that the number of fish should not be more than your tank can support.

Another rule is that if you have fish which eat live food in a tank with those that bear live young, you will not raise many young ones! Actually, if you want to breed fish, you need special tanks for the purpose. I shall be giving you more hints on this.



Two pets meet at London's Crystal Palace zoo-the gardener's pet cat and a three-weeks-old rabbit.

DO NOT DISTURB

If you have a tortoise it is probably by now asleep for the winter. I hope you gave it a snug box to sleep in, with some sort of bedding, because it will be hibernating for several months. There are two things to watch out for with sleeping tortoises. The first is to guard them against rats and mice. From time to time look to see if the box has been disturbed and make sure it is somewhere where the pests cannot get at it. Never waken a tortoise once it has gone to sleep. The only excuse for bringing a tortoise out of hibernation is in a real emergency, and then you will have to keep it awake and warm for the rest of the winter. If

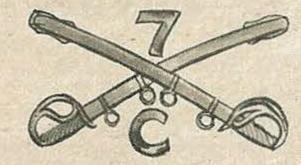
you once awaken it and then let it go back to sleep you are almost sure to lose your pet.

WET PAINT

WHEN your cat or kitten makes a mistake and gets fresh paint on its fur, be careful how you treat it. Do not try to clean the paint off with either paraffin or turpentine, for both are harmful to a cat and will make the hair fall out and quite possibly inflame the skin. Clip away as much of the paint-covered fur as you can with a sharp pair of scissors, and let the hair grow back.



26



Hat Device of Company C, 7th U.S. Cavalry.

SEVEN HUNDRED cavalrymen rode out from Fort Abraham Lincoln with General Custer to meet the Sioux Indians at Little Big Horn river on June 25, 1876.

Blue-uniformed, armed with sabres, pistols and rifles, these were the men of the 7th U.S. Cavalry Regiment.

Their general believed that only a small force of Indians were gathered by the river. But he was mistaken. A few hours later one whole column of his regiment had been massacred and the general himself lay among the dead. A few desperate cavalrymen were still holding off more than two thousand screaming Indian warriors when a relief column arrived next day.

Nearly half the regiment was killed in this heroic battle, but Custer's Last Stand has gone down as the most glorious episode in the history of the regiment, earning it the nickname of the "Fighting 7th."

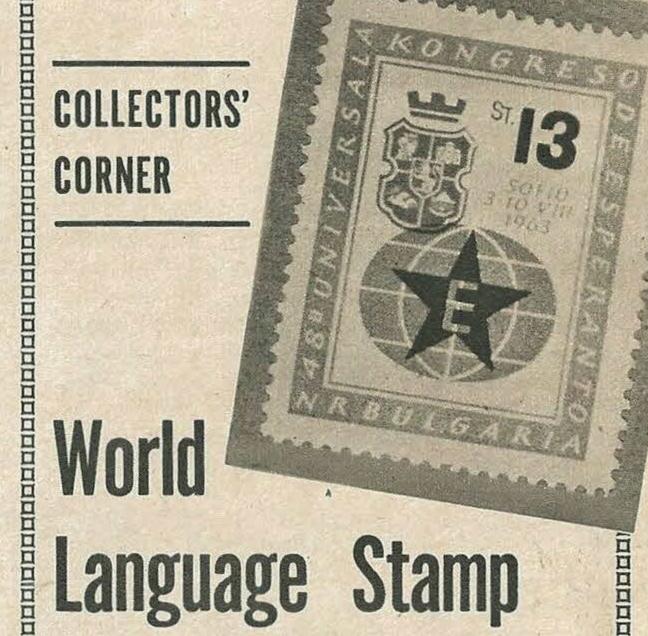
Bandits and Indians

THE 7th U.S. Cavalry was formed in 1866, shortly after the American Civil War had ended, and from the start it was under the command of Custer. This man, who had a brilliant war record, forged the men under him into a fine fighting machine which played a major part in wars with the Indians.

His regiment won its baptism of fire in an attack on the Cheyenne village of Chief Black Kettle on the Washita river, Oklahoma, saw service all along the frontier, and fought its last Indian battle at Wounded Knee Creek in 1889-90.

During the 1914-18 war the regiment fought the army of the Mexican bandit, Pancho Villa, and did patrol duty in Mexico and then the Philippines. They fought in World War II (1941-45) and the Korean War.

The regiment ceased to exist on September 23, 1957, when it was absorbed into tank, jeep and other armoured units.



SPERANTO is the international auxiliary L language invented by Dr. L. L. Zamenhof, an oculist in Warsaw, and first published in 1887. It was intended to be a second language to everyone, and so facilitate international relations. It made rapid progress in the last years of the century and the first international congress was held at Boulogne in 1905. A British Esperanto Association has been formed. In 1924 the League of Nations recommended [that the States Members should use Esperanto as a second language. Bulgaria has issued a stamp to commemorate the forty-eighth Universal Esperanto Congress to be held in Sofia this August. A five-pointed star, the Esperanto emblem, and the coat-of-arms of Sofia are shown on the stamp.

CONTINUING . . . THE ORIGINAL ADVENTURES OF THE WORLD'S MOST FAMOUS SCHOOLBOY

TRACKING DOWN THE STORY SO FAR Billy Bunter has run away from Greyfriars because of trouble with Loder of the Sixth over some pilfered tuck. He makes his

way to Pegg, the nearby coastal town, and gets taken on as a cook aboard the vessel Sally Ann. But he is soon in trouble again, especially when he is discovered eating half the food in the galley. Meanwhile, back at Greyfriars, the disappearance of the fat one is still a deep mystery.

by FRANK RICHARDS

THE SIXTH CHAPTER

The Search Begins

YOU kids are coming with me this morning," Gerald Loder said as he looked into Study No. 1 in the Remove passage at Greyfriars.

Morning lessons were over, and the juniors were discussing the topic that was now in everybody's mind at Greyfriars—the mysterious disappearance of William George Bunter.

Harry Wharton & Co. looked up in

surprise.
"Where are we going, Loder—on a picnic?" asked Bob Cherry.

"No-to find Bunter!" the prefect growled. "Mr. Quelch's orders!"

"Hurry up, you kids!" Loder growled. "I don't want to waste any time. We shall

have to have dinner when we get back, I suppose. Get your caps!"

They went downstairs and left Greyfriars, making their way along the Redclyffe road towards Pegg, inquiring for Bunter as they went.

The first clue they found came from the driver of a van which was drawn up outside a little roadside grocery store.

"Lookin' for a schoolfeller-wot?" grinned the man. "Rather short and very fat? Haw-haw! I saw him yesterday on this road, a little higher up towards Pegg. 'E was walkin' in the middle of the road, daydreamin' I reckon, for 'e didn't take any notice of my horn until I nearly knocked him down. Went clean through the hedge, 'e did! Haw-haw-haw!"

"Come on!" said Loder hastily. "We're on the track of the little rotter at last! I think he was on his way to Pegg!"

He was all eagerness to lay the runaway Owl by the heels. Billy Bunter had cited him as the cause of all the trouble, and Loder had been chipped unmercifully at Greyfriars. Things would go hard with the fat junior when Loder did catch him.

"Here we are!" said Bob Cherry breezily as they entered Pegg. "It wouldn't be a bad idea to make a few inquiries in the town. Bunter must have eaten since he left Greyfriars, or his corpse would have been picked up by now! Let's see if he had any grub around the harbour!"

They little knew how close they were on

Bunter's trail. "My hat!" exclaimed Harry Wharton suddenly. Looking along the quay he spotted the Sally Ann, and saw a plump figure dash out of the fo'c'sle and scuttle along the deck,

with two wrathful-looking seamen in chase. "Great pip!" gasped Bob Cherry in a faint voice. "It is Bunter!"

It was indeed the fat junior, and once again he was in trouble! Murphy the mate and one of the men had found him looking in their sea chests for any sign of extra grub. They rushed at him in great wrath, chased him around the fo'c'sle and out on the deck.

Bunter gave a gasp when he saw the Greyfriars boys watching him. "Oh crumbs!" he gasped. "The beasts

have seen me! Grooooogh! Yah! Wow! Keep off!' Murphy's heavy hand descended on the

fat junior, and he was whirled over. "Got you, you slippery son of a sea-rat!" Murphy grated. "We'll make it hot for you

now. Gimme that rope, Trent!"
"Yaroooogh! Help! Leggo! Murder!" wailed Billy Bunter. He was hauled across the burly mate's knees and the rope rose

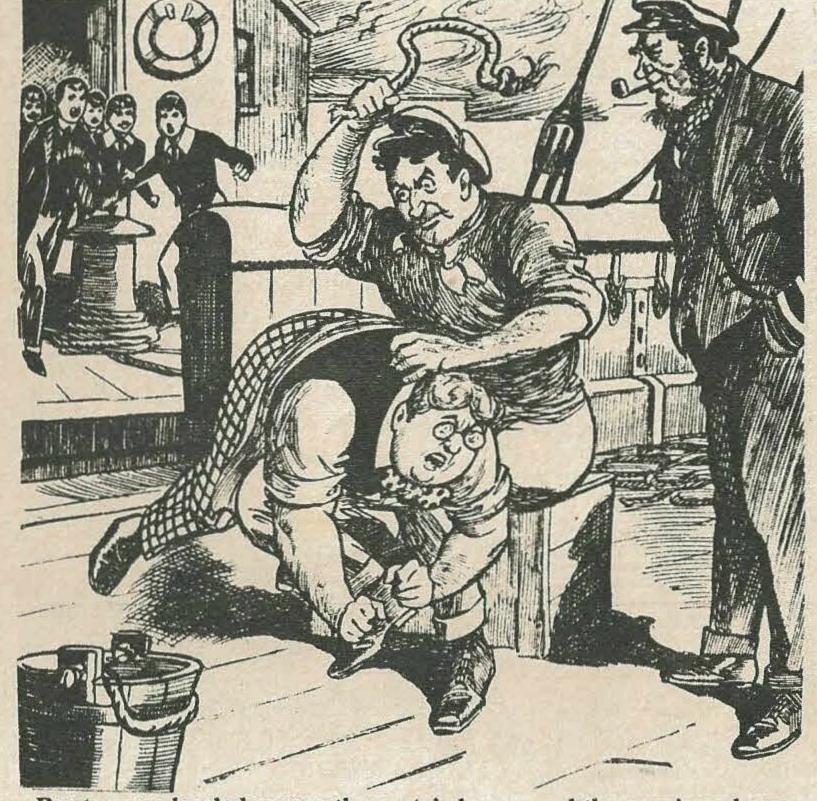
and fell on his fat person. Billy Bunter's yell rose crescendo. Captain Dodds came up from his cabin and he

looked on, nodding with approval. Loder and Wharton & Co. ran to the

quayside. "Hi!" bawled Loder. "We've come for Bunter-he's a runaway from our school!" They leapt aboard. Gerald Loder's eyes were glittering maliciously as he looked at Billy Bunter, who had staggered to his feet, his knees knocking together.
"Yaroooogh! Don't let 'em take me

back!" he howled, making a dive out of Murphy's hands. "I won't go back! I say, you fellows, I've run away to sea-"

"Ha, ha, ha!" roared Harry Wharton & Co.



Bunter was hauled across the mate's knees, and the rope's end rose and fell on his fat person. Loder and Harry Wharton & Co., ran to the quayside. "Hi!" roared the prefect. "We've come for Bunter!"

"Come here, Bunter!" Loder commanded,

striding forward.

"I won't! Help! Keepimoff!" Bunter howled as he dodged around the main hatch, scuttled across the deck and made a dive for the rigging.

"Mum-my hat!" gurgled Bob Cherry blinking at the fat Owl as he began to climb the rigging. "The burbling chump! Loder's bound to get him now!"

Loder ran across and began to climb the rigging after Bunter. The Owl of the Remove blinked in terror and climbed higher. He now held the prefect in mortal fear and fear gave him bravery that he would not otherwise have possessed.

Loder reached Bunter near the cross-trees and made a grab at him.

"Now, you little rotter!" he grated. "We'll see whether you can defy me and-" "Yarooooogh!"

That wild yell rent the air and to the horror of all, they saw the fat form of Billy Bunter topple off the cross-trees into space.

Splash! Bunter had just cleared the ship's taffrail and fell into the sea with a choking gurgle.

"Yerrrrugh!" That was all. Silence followed for a few moments. Harry Wharton & Co. and Captain Dobbs and the crew of the Sally Ann stood spellbound. Loder clung to the rigging and looked down wildly. Then he clambered down on deck, his face as white as a sheet.

"Bunter's overboard!" shouted Bob

Cherry. "Come on, chaps-get a rope!" Everybody ran to the ship's side and looked over. But no sign of Billy Bunter was to be seen.

"He-he couldn't have come up!" said

Frank Nugent.

Loder licked his dry lips.

"I didn't throw him over-he fell!" he muttered. "If any harm has come to Bunter, it wasn't my fault! Can't somebody lower a boat? He—he must be floating somewhere!"

Captain Dobbs speedily had a boat lowered. Harry Wharton, Loder and Johnny Bull got aboard. But although they rowed around the Sally Ann for nearly half an hour, they did not discover any trace of Billy

"I'm blessed if I can make it out," said Wharton as they clambered aboard again. "Bunter couldn't have struck his head in falling, and-"

"The fat rotter's swum ashore, and wants us to think he's been drowned!" said Loder thickly. "But in any case, it wasn't my fault!"

"If you hadn't terrified Bunter, he wouldn't have climbed the rigging anyhow!"

said Johnny Bull bluntly. "Well, perhaps Bunter has swum ashore and is hiding in one of the caves," said Harry

Wharton. "Let's go and have a look!" But a thorough search along the cliffs failed to give any clue to the mystery, and the juniors returned to Greyfriars tired and hungry.

Mr. Quelch heard the news with deep concern and immediately phoned the police. But the mystery of Bunter remained.

THE SEVENTH CHAPTER

Return By Night!

E, HE, HE! That's frightened 'em!
The rotters will think I'm dead, now!
What a lark! He, he, he!"
William George Bunter was very much

He was hiding in the hold of the Sally Ann.
They were dark and dismal quarters, and being wet through after his ducking in the sea, Bunter felt rather uncomfortable. But he didn't mind so much now. He was getting used to roughing it.

On falling into the sea from the rigging, Bunter had come up under the stern of the Sally Ann, and holding on to one of the anchor ropes, had kept himself afloat. He had seen a rope hanging down from the porthole of the sail locker and by a superhuman effort had clambered up the rope and squeezed through into the sail locker.

He remained in the sail-locker all day and crept out when the crew were in the fo'c'sle and the strains of a concertina were rising discordantly over the waters of Pegg Bay. Then, wrapped in a white sail, he crept out of his hiding place and reached the deck. The gangway was lowered, for Captain Dobbs was about to return from a visit on shore. Bunter could leave as easily as he wanted, but first of all he was determined to give the crew a scare.

· Walking to the fo'c'sle door, he rapped three times upon it. The concertina stopped playing and the door opened. Four surprised faces looked out, and when they saw the ghostly white form on the deck, four yells of terror rent the air.

"Tis a ghost!" bellowed Murphy, dropping his concertina, "'Tis the ghost of young Bunter!"

Billy Bunter waved a ghostly arm aloft and made a movement towards the fo'c'sle.

Slam!

The door shut violently. "He, he, he!" chuckled Billy Bunter to himself. "That's scared the beasts. Now to get ashore!"

He made his way along the deck and clambered on to the gangway. In his haste he missed his footing and pitched headlong down the gangway, finally to land in a heap at the feet of Captain Dodds.

"Wow-wow-wow!" moaned the white-clad heap at the skipper's feet. Captain Dodds blinked down in amaze-

ment at the fallen one. "Sufferin' sunfish!" he ejaculated. "What the---why, douse my binnacle light, it

sounds like young Bunter!" The skipper, to make sure, stirred the white-clad figure with his boot, and Billy Bunter rose yelling. He flung the sail from him and ran along the quayside as fast as his

fat little legs would carry him. Two hours later a fat, weary, dishevelled youth crawled up Friardale Lane and halted outside Greyfriars school wall.

The wanderer had returned to Greyfriars —but his troubles weren't over yet!

Next Week: **BUNTER UNDER SIEGE!**

ANSWERS TO QUICK QUIZ (from page 2)

(1) Louvre, Paris (2) Dutch. (3) Holbein.

Science

(1) An anti-magnetic material. (2) The process of obtaining greatly enlarged photographs of small objects. (3) The arm.

Literature

(1) Sir Thomas More. (2) Lord Byron. (3) Becky Sharp. Geography

(1) Canada. (2) Asphalt. (3) Arkansas.

(1) Sir Malcolm Campbell. (2) Charles Blondin. (3) Grace Kelly.

SOLUTION TO CROSSWORD (from page 8) ACROSS: I, Davis; 4, Drury; 9, Debate; 10, Avenue; 12, Prong; 13, Corsair; 14, Cracker; 20, Compose; 22, Largo; 23, Rookie; 24, Sprint; 25, Rhine; 26, Fever. DOWN: 2, Albion; 3, Integer; 5, Rover; 6, Runway; 7, Adept; 8, Ferry; 11, Icicles; 15, Eclipse; 16, Acorn; 17, Smooth; 18, Praise; 19, Aorta; 21, Orion.



PRECIOUS CARGO

