LETTERS IN TRANSIT

BRITAIN ADVANCES


POST
OFFICE

BRITAIN ADVANCES

Letters in Transit

by

Frank Singleton

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LETTERS IN TRANSIT

In the summer of 1939, Mrs. Brown's first baby was born in a big hospital in Central London; three years later she went back to the same hospital to have her second, a girl.

This, however, is not the story of Mrs. Brown and her family. It is the story of how two letters travelled to their destinations to tell of the children's arrival. When the first child came, its father was working on a farm in Cornwall, the extreme south-west corner of England, nearly 340 miles from London. Mrs. Brown's sister, Mary MacDonald, thought of sending him a telegram, but she decided that a letter would be more satisfactory : she could say much more, reassuring him about his wife as well as saying how pleased everybody was, and if the letter was delivered early the following morning, as she was assured it would be, very little time would be lost.

The letter was dropped into a letter-box in Central London at a quarter past seven in the evening. There it lay on top of 50 other letters and post-cards. At half-past seven a postman emptied the box, sweeping those 50 into a bag which already contained the letters he had collected from half a dozen other post-boxes. He then went on, taking in more and more letters until Mary MacDonald's was one of over 500 in his bag. That bag

was taken into a Branch Post Office where the letters, together with those brought in by other postmen and bundles of letters which had been handed over the counter by business firms, were put into mail bags which, a short time later, were loaded into a van for conveyance to the main

Post Office vans

sorting office. In this van Mary MacDonald's letter became one of over 5,000. Thirty similar vans brought similar loads; when all their contents were turned out in the main sorting office, Mary MacDonald's envelope was but one of 150,000.

That was a single Central London collection of letters. All over London there would be other collections the same night. Later still, collections from other districts would be brought in. The arrival of letters at the main sorting office never stops.

Of the 150,000 letters, 6,000 were addressed to Scotland, 4,000 to Wales, 2,000 to Northern Ireland, a smaller number were going abroad, and the majority to various parts of England, north, south, east and west. About 8,000 were destined for western England, and of these some 600—including Mary MacDonald's letter to her brother-in-law—were going to Cornwall.

The letters for Ireland would have to be put aboard a mail-boat and would not be delivered till about thirty-six hours after they were posted.

The General Post Office, London

But all those for England, Scotland and Wales would reach their destinations on the day following the evening on which they were posted.

Mary MacDonald's letter was addressed to the little town of Sennen, two miles from the rocky point known as Land's End, which juts out into the Atlantic. To get there, the letter had to be carried for 337 miles. Although it began its journey from London as one of 150,000 letters, addressed to widely different parts of the country, it had to be delivered correctly, as had all the other 149,999. There must be no mishap which

would send it to Scotland instead of to Cornwall—or even to Newlyn, which stands seven miles from Sennen. And it had to travel 337 miles in 13 hours.

There would be no time to waste—no space for muddle or confusion—no room for doubt about the letter taking the correct route. There must be no danger of it being lost nor any possibility of it being delayed : it has to be put into Mr. Brown's hands before nine o'clock the following morning.

—to Land's End

Printing postmarks

Of the many things that happened to make this swift and accurate journey possible, the first was a division of the 150,000 letters and packets, which were gathered in the main sorting office, into three groups, according to size. The mechanical devices which help the speedy sorting and postmarking of letters cannot operate when a roll of newspapers comes next to a postcard. So there must be this preliminary division which

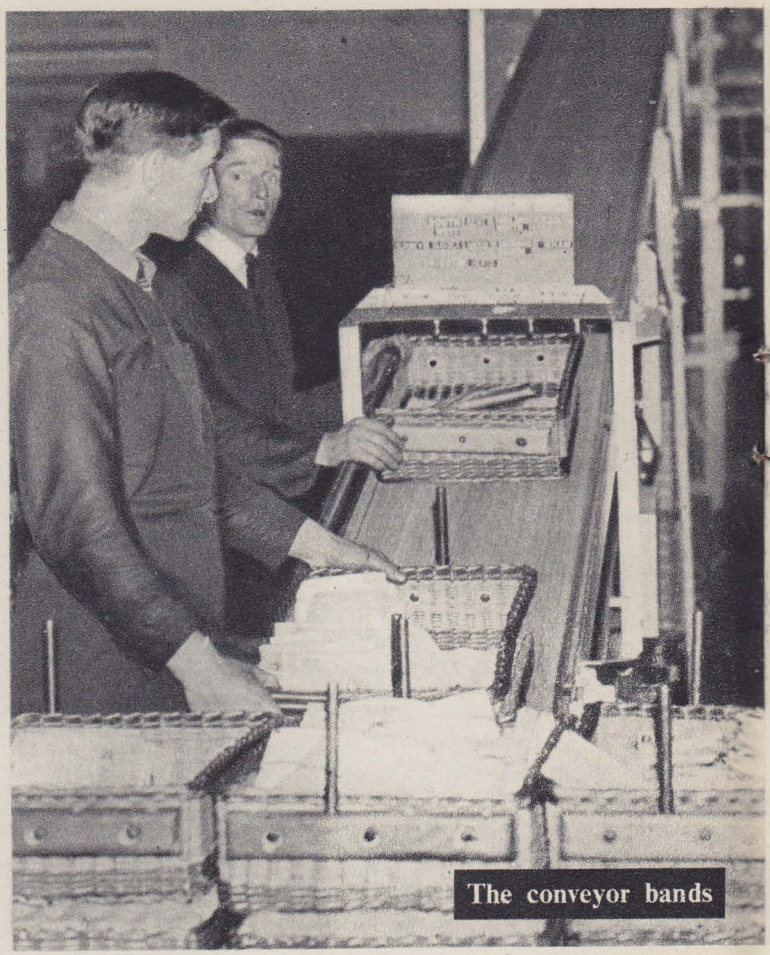
separates the packets from the letters and the large letters from the small ones and postcards. The small (ordinary sized) envelopes and the postcards are all turned one way, with the address to the front and the stamps in the top right-hand corner. They are then put on a band of taut canvas, which moves forward on rollers and carries them to machines where postmarks are printed across the stamps at the rate of seven hundred a minute.

The letters are then transferred to tables where men with a long experience of the work sort them according to wide districts. By this means, out of the 150,000 packets, the 8,000 destined for the west of England are separated from the remainder and put by themselves into a number of baskets which are laid on moving "conveyor" bands.

Across and around the sorting-room, these bands stretch in all directions, joining and crossing one another like the tracks at a railway junction.

Sorting letters

The baskets laid on them move forward and turn to right and left—in a way that to anyone unaccustomed to the sight would seem astonishing—exactly as if they were choosing their own paths. The explanation, however, is very simple. At either end of every basket is a row of holes ; into two of these holes (one at each end) has been placed a wooden peg, obtruding upwards; and above the moving conveyor bands are iron loops in various positions. Pegs placed on the extreme right of a basket will escape all the iron loops on the left—but when a pair of pegs meet a loop in a corresponding position to their own, they will be caught and then the basket will be gently dragged out of the main road and onto the "branch line" for which it is intended.



The conveyor bands

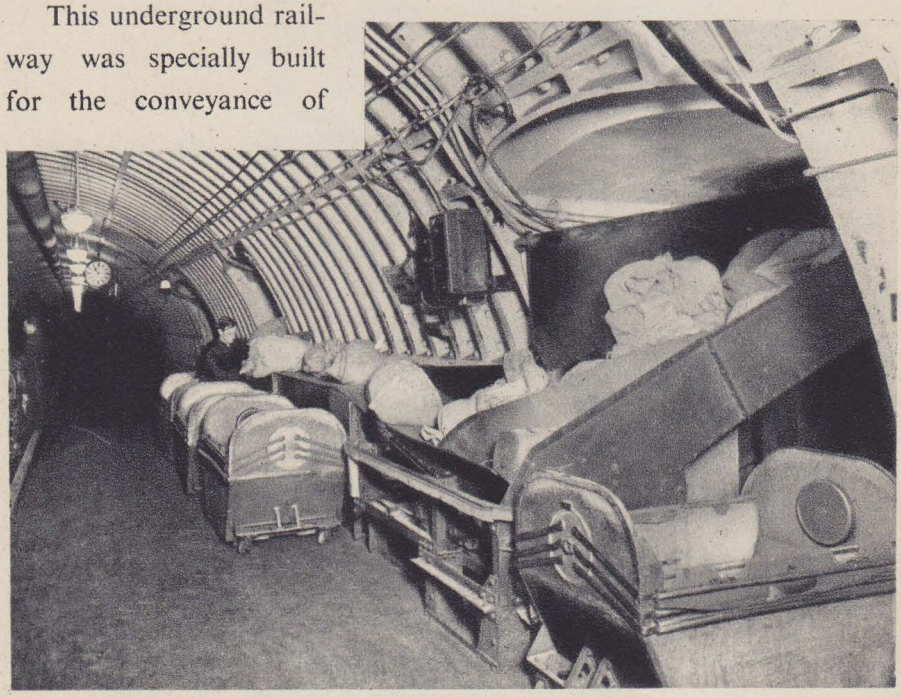
Thus the many baskets containing the 8,000 "west-of-England" letters all travel across the sorting-room to one set of tables, while the remaining 142,000 letters go to tables marked with the names of other districts.

Then the 8,000 letters are sorted again, according to towns. Through this and further sortings, Mary MacDonald's letter eventually becomes one of a bundle of letters for different addresses in the County of Cornwall.

This, with some fifty other bundles of letters going to other districts in the west of England, is put into a mailbag. That mailbag, with others, then begins a longer journey through the building: it is carried on various conveyor belts and finally dropped into a spiral chute which takes it,

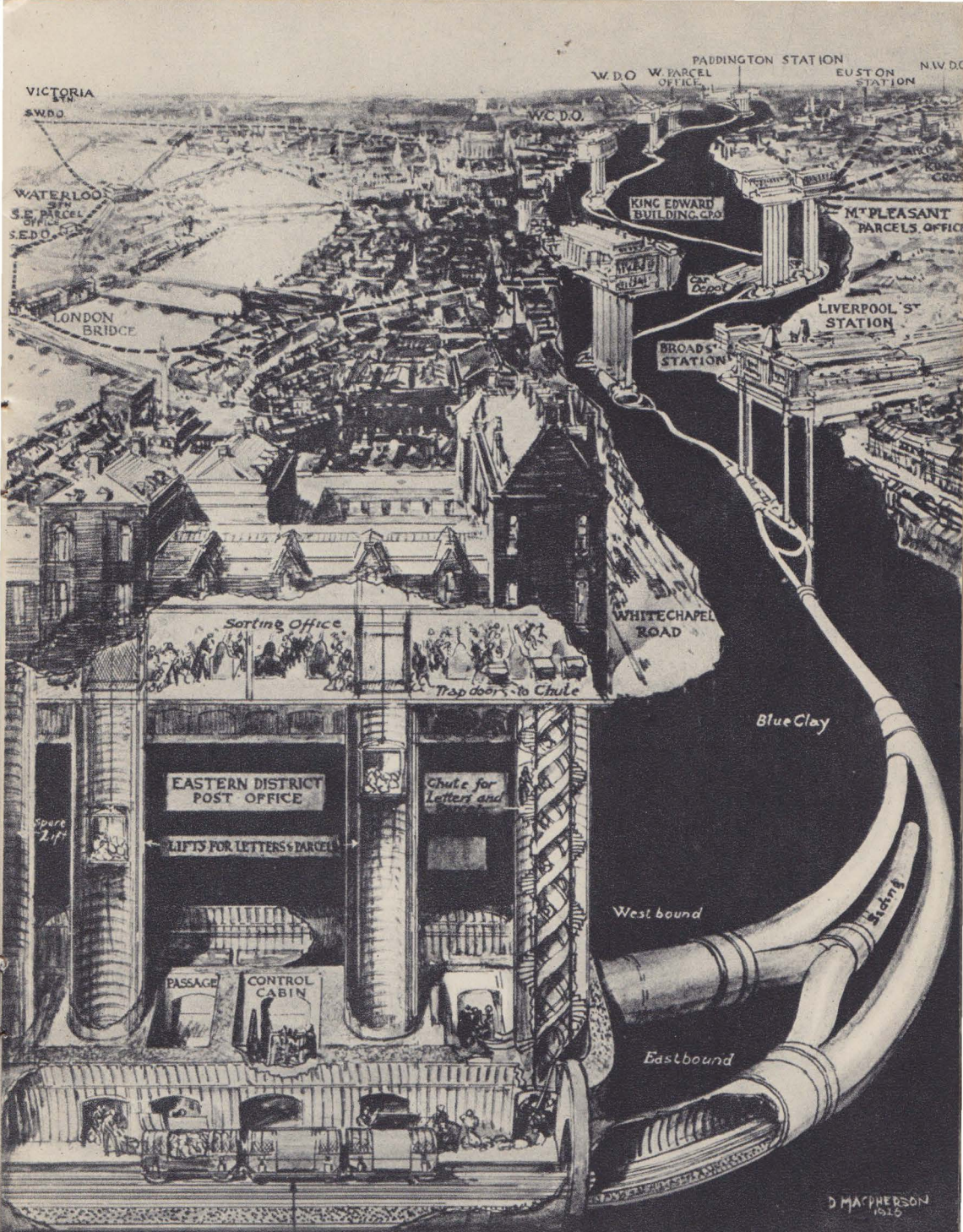
tumbling and turning, far below the surface of the ground and onto the platform of the Post Office Underground Railway.

This underground railway was specially built for the conveyance of

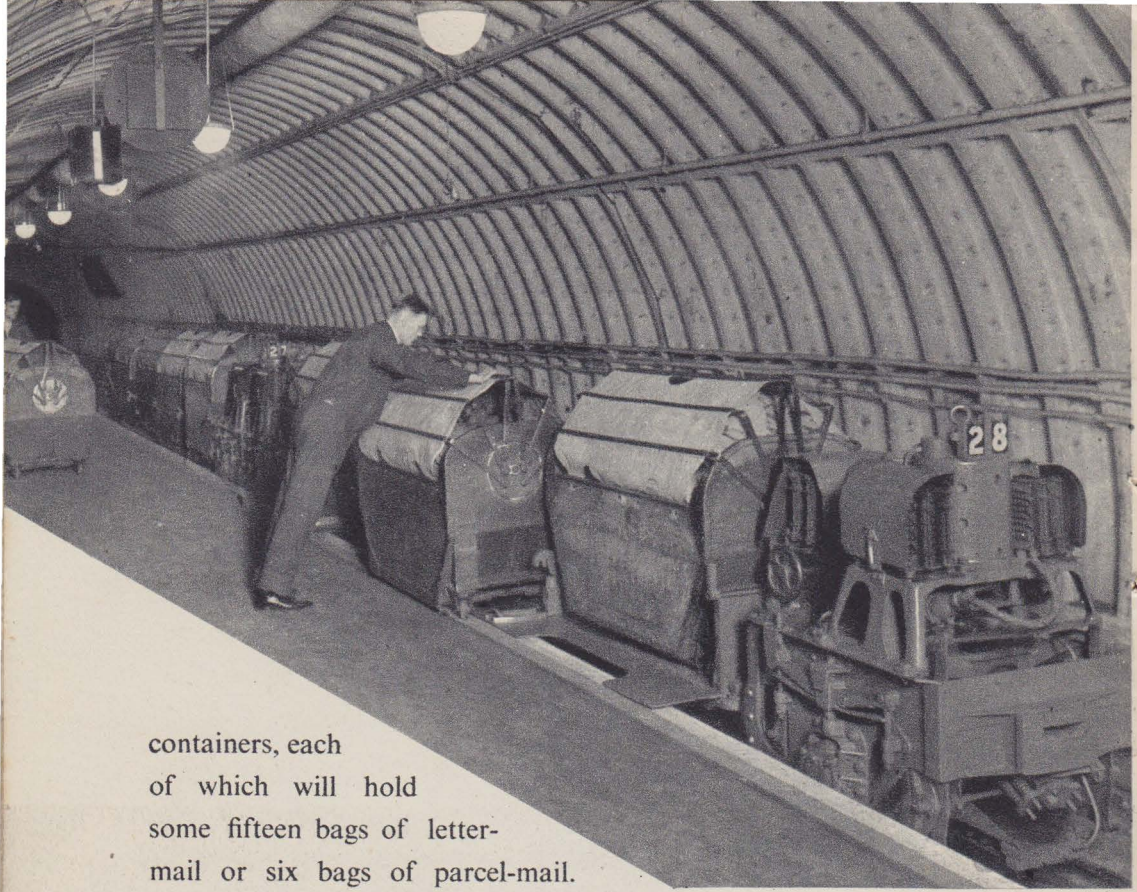


mails and is the only one of its kind in the world. It carries 30,000 mailbags every day. Every hour of the day and night forty trains rumble through more than six miles of tunnels far below the crowded streets of London. It is, of course, quite apart and different from the Underground Railways for passenger traffic: it is much smaller, it runs on a special route of particular value for the transport of mails, and its trains operate automatically, without a driver.

A train is already waiting at the platform when the mailbags come down the chute. The electric engine stands about five feet high and draws two cars, each about twenty-seven feet long and carrying four mailbag



Sectional diagram of the Post Office Underground Railway



containers, each of which will hold some fifteen bags of letter-mail or six bags of parcel-mail.

The train is started and stopped by the turning on and off of the current from the platform. Once started, it runs at an average speed of thirty-five miles an hour, only reducing speed on the up-gradients at the approaches to stations, where more mailbags are added to its load.

In a very few minutes after leaving the Central Post Office the underground train reaches the terminus station which is exactly under one of the great surface Railway Stations. There, on the underground platform, the containers are quickly unloaded into trucks and wheeled to lifts or special elevators which carry them to ground level.

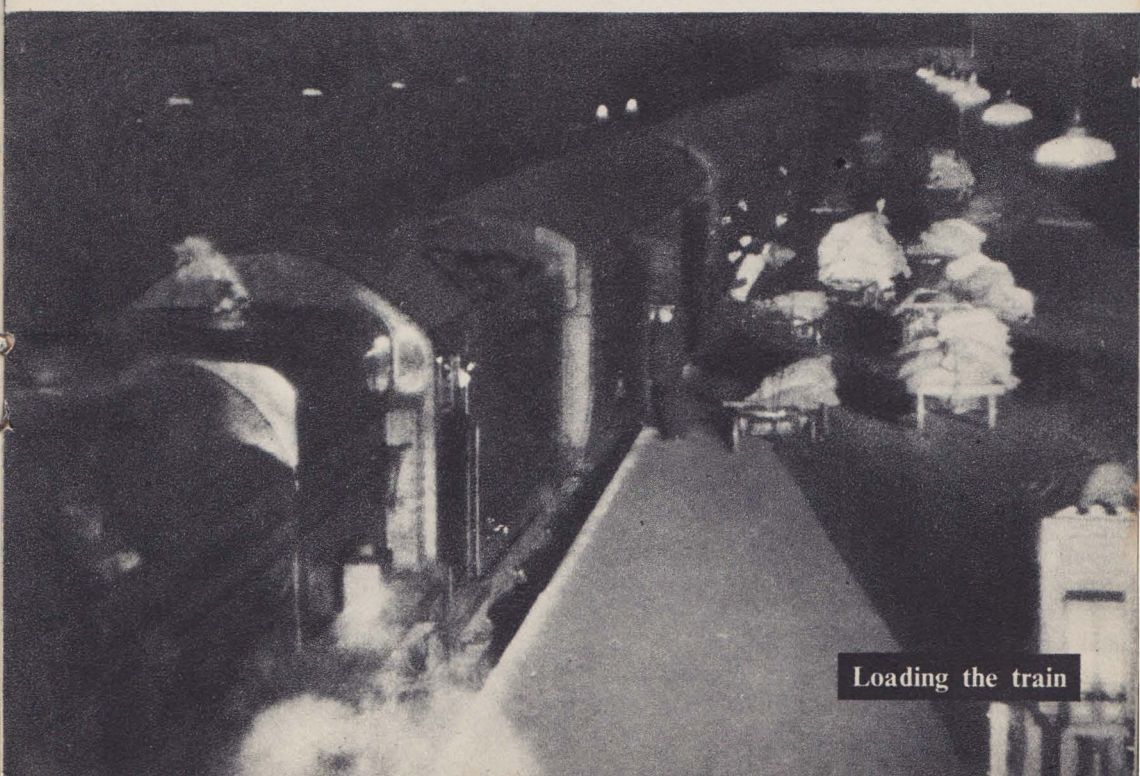
It is now two and a half hours since Mary MacDonald's letter was

dropped into the letter box. In that time it has gone through the slowest but most necessary part of its journey. It has been collected from the box and carried to the Central Post Office: it has been sorted out from 149,999 other letters, so that it cannot go astray but must go with 599 others to Cornwall: and, without becoming involved in the traffic of the city or being delayed by fogs, it has been carried to the terminus of the railway which will take it to the south-west corner of England.

But though that is now accomplished, there is still no time to waste. In the two and a half hours that have passed, the letter has travelled no more than three miles from its starting point and its destination is still 334 miles away—334 miles to be covered in $10\frac{1}{2}$ hours.

The train for the south-west of England is waiting at the main line platform. It is neither a passenger train nor a goods train, but a special mail train, known as the Travelling Post Office: it consists of ten coaches and will carry only mail bags and the men to deal with them.

Mail bags are arriving continuously and being loaded onto it. Some



Loading the train

Sorting letters on the Travelling Post Office

came by the Post Office Underground Railway, some in vans from near-by post offices. Last-minute letters are put in a box attached to the train. There is haste, in the busy railway station, but no confusion: this travelling post office leaves London at ten minutes past ten on every evening of the year except Christmas Day.

The train starts. As it gathers speed, the twenty-five men who staff it have already begun their work. The various bundles of letters require further sorting. Those for districts in Cornwall now have to be divided up, so that those for Newlyn can be put into one pigeon-hole and those for Sennen in another, and so on. This is done while the train moves westwards at sixty miles an hour—there is no time to waste. It is not easy work, sorting letters in a swinging carriage on a racing train: all the corners of the fittings are padded, since otherwise the sorters would be badly bruised.

By no means all the letters on this train are going to Cornwall. Some have to travel no more than eighty miles in the travelling post office and then have to go by ordinary train to towns away from the main line—and letters from those towns and districts, destined for the west, have to be gathered onto the travelling post office. But this train cannot stop for those exchanges, because frequent stoppages would delay it considerably and make the journey of 334 miles in 10½ hours impossible. So it must put down bags of mail and pick up other bags, without stopping, while it races on through the night at a speed which reaches at times more than eighty miles an hour.

Somewhere along the side of the track stands an upright post with a projecting arm and a net. Against the side of the train are a similar arm and net, which can be swung outwards. To these two arms—one on the ground and one on the train—the bags of mail which are to be exchanged are attached as the train draws near. For a fraction of a second the arms

Letters out—letters in—as the train races on

and nets engage, the mailbags are released from the arms and caught in the nets, the arms swing clear—and the exchange has been made. The men who await the letters from London pick up the bags and carry them to waiting trains: the men on the travelling post office have fresh bags of letters to sort and to carry on to the west country. The train has not stopped, nor has it slackened speed for a second.

But there are a few places where even this train must stop, to take up and put down more bags of mail than can be handled by the automatic apparatus. Thirty minutes after midnight, it stops at a big junction in the West Country, which is not only a railway junction but also one on the travelling post office system: for these special trains run every night at many angles across Britain, and during a single hour in the middle of the night no less than six travelling post offices come into this junction, stay a short time and depart. The train for Cornwall stays fifteen minutes and in that time a great many mail bags have to be moved, some off the train to be sent to Wales and the Midland Counties of England, others onto it to be carried westwards with those already aboard. The fifteen minutes in which this has to be done is a fixed period—it cannot be lengthened in any circumstances. There may be 800 bags tonight instead of the average of 700; but the train cannot wait a corresponding extra two minutes. Nor even one minute. It has travelled 118½ miles. The letters for Sennen have still to be carried 207 miles and more than two and a half hours have passed since they started from London: those 207 remaining miles have to be covered in 5½ hours after the 15 minutes wait at this junction.

The train will make a few more stops before it reaches Penzance, within a few miles of Land's End. Meanwhile, twenty-five miles after its first halt, it will run for a few miles within sight of the sea, the Bristol Channel, where if it had been daylight Cardiff, the great port of South

Wales, would have been visible across a twelve-mile stretch of water. It will turn south, through Somerset, with its rolling, tree- and bracken-covered hills; run across Devon, skirting Dartmoor, the lonely stretch of marsh and rocky hillocks swathed in mist; come to Plymouth, the great naval port on the south coast; and then continue on a winding course along the southern shore of Cornwall, avoiding innumerable creeks and inlets, crossing to the northern shore at a point where England is no more than six miles wide in this extremity of its south-western corner; and so will reach Penzance at 6.25 a.m. 325½ miles have been covered by the travelling post office in 8¼ hours.

At Penzance, the letters for Sennen are handed to a waiting postman, who takes them in a motor van for the last eight and a half miles of this long journey. In Sennen Post Office the letters are once more sorted according to the villages of the district, and sub-sorted to particular streets in the towns and villages. Then other letters that have been posted only a mile or two away are added to those that have travelled from London, and a postman sets out on a bicycle to deliver them.

It is now eight o'clock in the morning. Shortly before nine Mary MacDonald's letter, which was posted in London at 7.30 the previous evening, will be safely delivered into her brother-in-law's hands. At one stage in its journey it was but a unit among 150,000 letters, indistinguishable from the others except for the fact that it was addressed to a house in Sennen: it has nevertheless travelled correctly to its destination, it has not been lost or delayed, and it has travelled 337 miles in 13 hours. So before the baby is one day old, Mr. Brown learns that he is a father, and that all goes well with the mother and son.

That was in 1939, when Mr. Brown was working in Cornwall. By the time Mrs. Brown had her second baby, the war had altered everything. For one thing, Mr. Brown had joined the Army and had become Sergeant Brown in the British forces in the Middle East. An ordinary letter giving him the news of the coming of his second child would now have taken not thirteen hours but probably four weeks.

But during the war a Kodak invention has been brought into service which enables letters to be delivered to far-away places much more quickly than if they went by the ordinary post. Accordingly Mary MacDonald went this time to the Post Office and asked for an Airgraph form. She took this single sheet of paper home and sat down to compose her letter, taking care to write very clearly and only on one side of the paper. Then, when all was finished, she handed the letter, with a 3d. stamp affixed, and the address written at the top in capital letters, but without an envelope, across the Post Office counter.

On the average, the number of airgraph letters sent from Britain

A small part of one day's collection of Airgraphs

every day is one hundred thousand, mostly to men in the British forces overseas; and as about the same number arrive, mostly from men in those forces to their friends in this country, that means that the Post Office has to handle something like three hundred thousand of these special letters every day—approximately one hundred millions a year !

If these were ordinary letters, written on note-paper and sealed in envelopes, the day's *outward* consignment alone would weigh over 2 tons (2,000 kilograms) and would fill a considerable space. It would have to go by ship, since that amount of weight and space could not possibly be allocated, in war-time conditions, in aircraft. It would then take at least four weeks, and would fill space that is urgently required for vital war supplies.

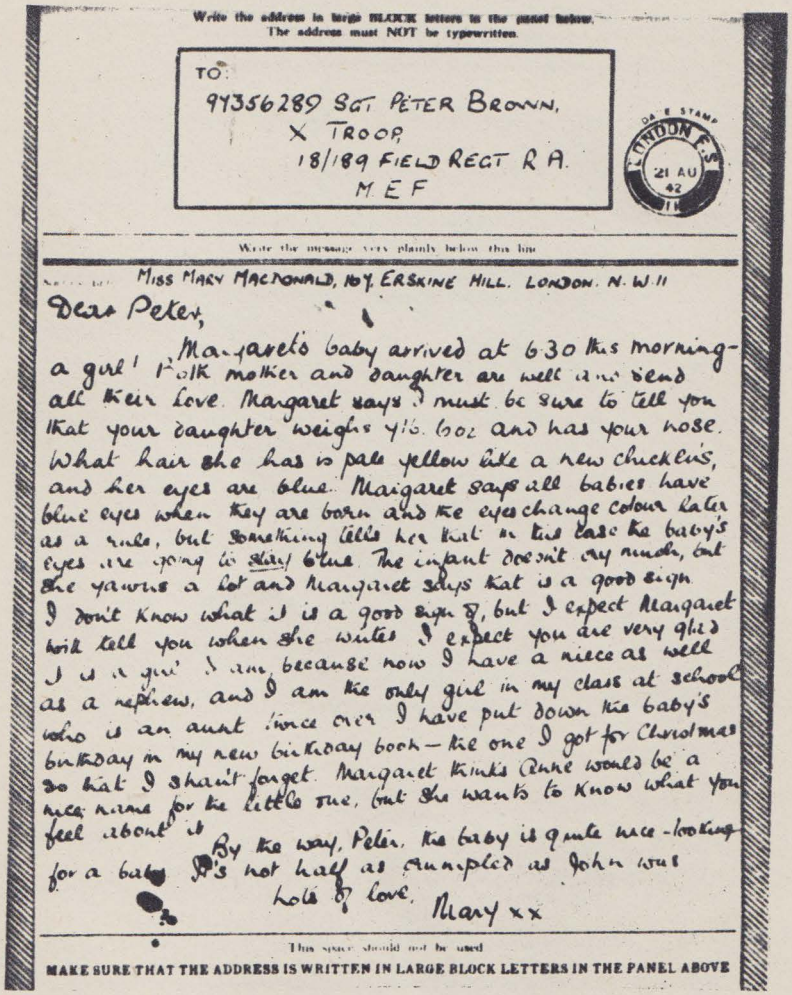
The invention of airgraph letters is therefore of great value because they fill a very small space indeed and have an almost negligible weight. The actual letter that the sender has written is not sent abroad at all:

Actual size of photographed letter

what goes to the Middle East is a very small photograph of it. At its destination the photograph can be enlarged (though it is not necessary to enlarge it up to its original size). Thus though Sergeant Brown did not handle the actual sheet of paper on which Mary MacDonald's pen made a blot of ink, he nevertheless saw her handwriting—including the blot.

All the airgraph letters handed in at post offices during the day are sent to a special department at the Central Post Office in London. There, they are sorted according to the areas to which they are addressed and

each is given a number by which it can always be identified. They then go into a room where girls sit before pieces of apparatus which might be mistaken for desks but which are in fact cameras. The airgraph letters are fed one by one, but very quickly, into these cameras, each of which



Write the address in large BLOCK letters in the panel below.
The address must NOT be typewritten.

TO:
9356289 SGT PETER BROWN,
X TROOP,
18/189 FIELD REGT R.A.
M.E.F

LONDON E.C.
21 AU 42

Write the message very plainly below this line

MISS MARY MACDONALD, 107 ERSKINE HILL. LONDON. N.W.11

Dear Peter,

Margaret's baby arrived at 6.30 this morning- a girl! Both mother and daughter are well and send all their love. Margaret says I must be sure to tell you that your daughter weighs 7½ lbs. 6oz and has your nose. What hair she has is pale yellow like a new chicken's, and her eyes are blue. Margaret says all babies have blue eyes when they are born and the eyes change colour later as a rule, but something tells her that in this case the baby's eyes are going to stay blue. The infant doesn't cry much, but she yawns a lot and Margaret says that is a good sign. I don't know what it is a good sign of, but I expect Margaret will tell you when she writes. I expect you are very glad it is a girl. I am, because now I have a niece as well as a nephew, and I am the only girl in my class at school who is an aunt. Once over I have put down the baby's birthday in my new birthday book – the one I got for Christmas so that I shan't forget. Margaret thinks Anne would be a nice name for the little one, but she wants to know what you feel about it.

By the way, Peter, the baby is quite nice-looking for a baby. It's not half as crumpled as John was.

Lots of love,
Mary xx

This space should not be used

MAKE SURE THAT THE ADDRESS IS WRITTEN IN LARGE BLOCK LETTERS IN THE PANEL ABOVE

Actual size of printed letter, as delivered

Airgraph cameras

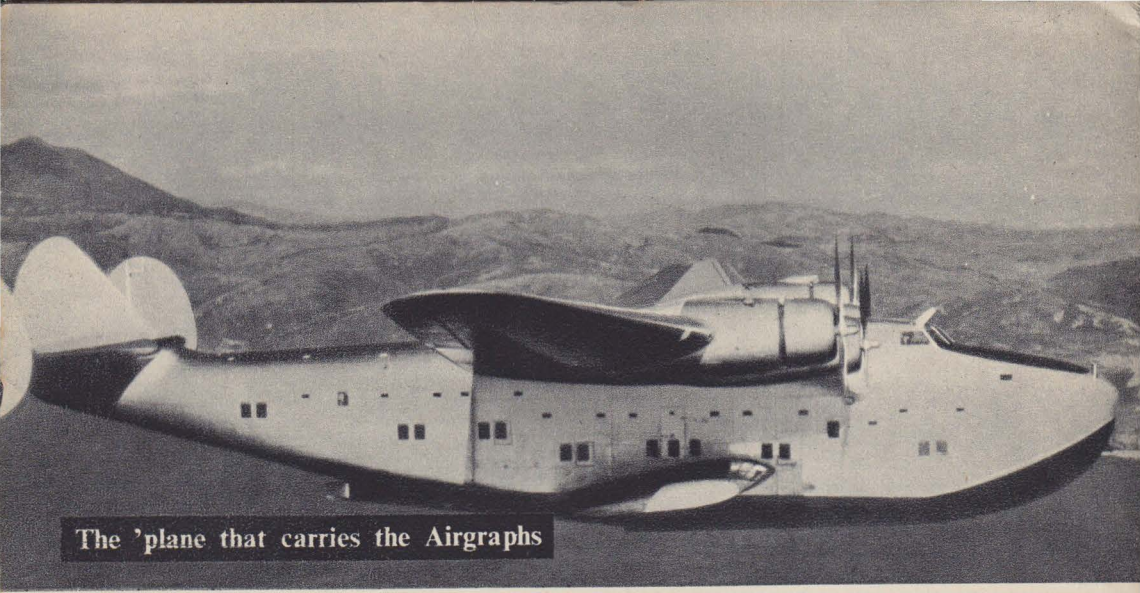
photographs 1,500 letters each hour, on rolls of film. These films are then unwound from their spools and developed by Kodak, and then wound again into containers.

This process has reduced the size of each letter from eleven inches by eight inches to two-thirds of an inch by half an inch. And the weight, including that of the plastic containers, has been reduced proportionately: whereas 100,000 ordinary letters on

notepaper and in envelopes would have weighed 5,000 lb., in the form of these small photographs they weigh only 25 lb. ! All the airgraph letters which are posted in Britain in three days can be carried in two small bags.

These bags are taken by rail from London to an airport—a small but precious consignment representing the concern of 300,000 people in this country for their men in the forces of the Middle East—and put aboard an

Spools of Airgraph film

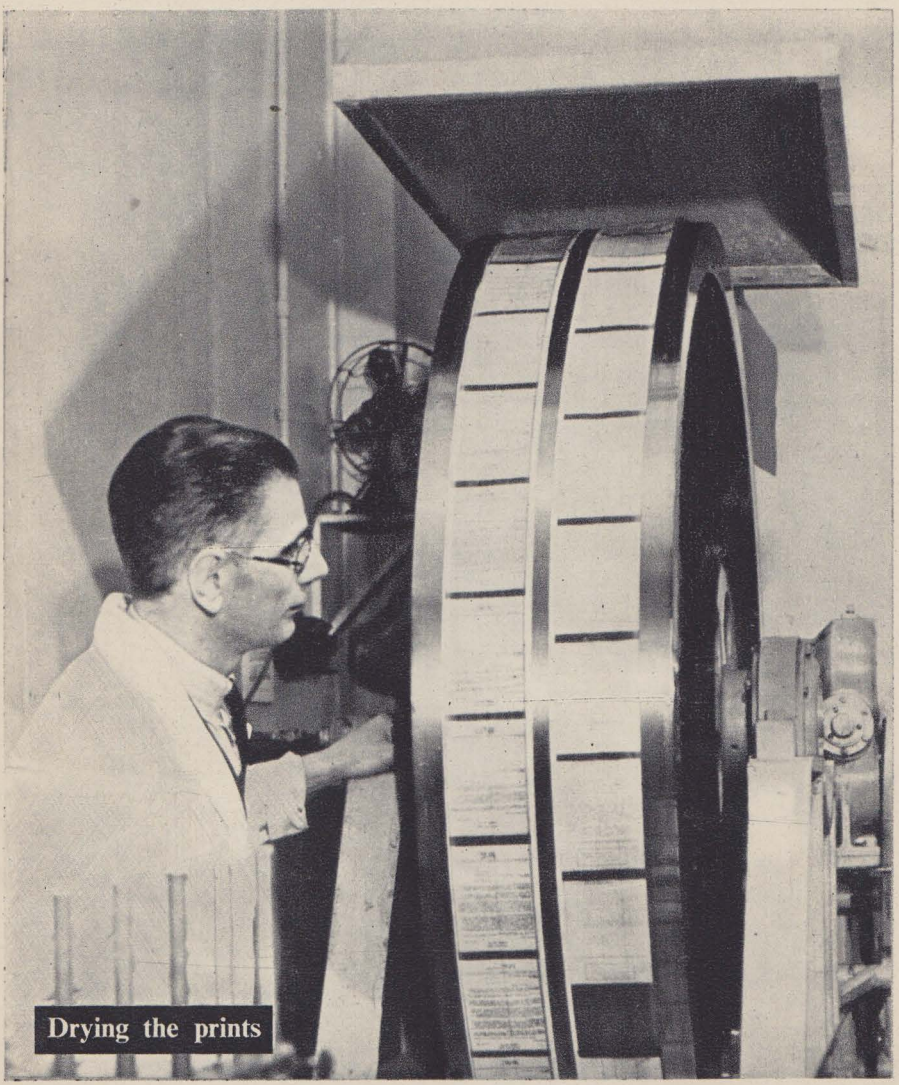


The 'plane that carries the Airgraphs

Examining Airgraph prints

aircraft. Then with no loss of time they are taken by air to Cairo.

In the Airgraph Office there, the films are unwound from their spools and enlargements are printed from them. When they are a quarter of



Drying the prints

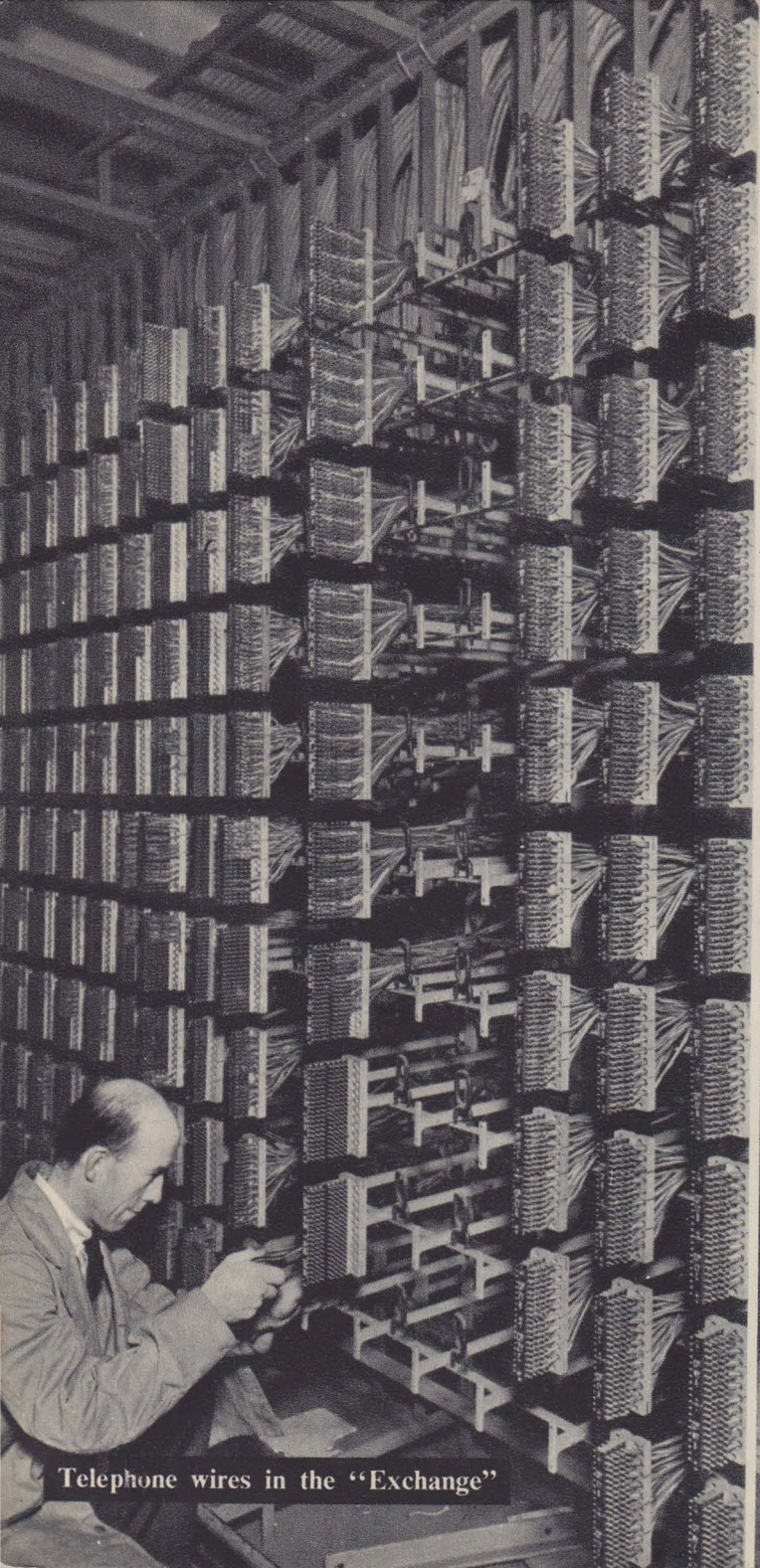
their original size the writing can easily be read. The prints are reproduced on a continuous roll of sensitized paper and therefore have to be cut apart by a guillotine. For the sake of privacy, the letters require envelopes, so these are provided and the letters are folded so that the address which was written in capital letters at the top of the page will show through a "window" in the envelope. Then the letters are sorted, franked, postmarked and delivered.

Thus Sergeant Brown receives his letter in Cairo, and learns of his daughter's safe arrival and of the health of his wife, only a few days after the baby was born in London, 2,400 miles away.

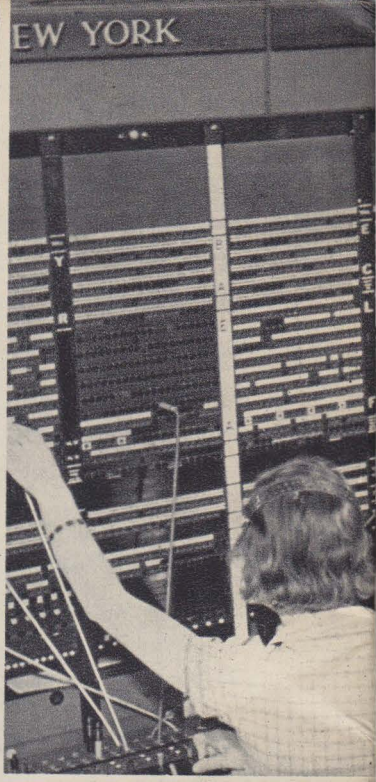
When Mary MacDonald writes next, she can include in her airgraph letter a snapshot photograph of the new baby. For that purpose she will have the picture printed on a special form of sensitized paper. It will go through one of the same cameras as are used for letters, will be reduced similarly to midget size and then enlarged again. The result will be as clear a picture as any ordinary print sent in an envelope by the regular post.

Whether letters have to be carried 2,400 miles abroad mostly by air, or 374 miles across Britain, mostly by train, or merely a mile and a half from one street in a small town to another street in the same town, there is behind their journey the vast organization of the Postal Service. This handles every year over 6,000,000,000 letters—and ensures their safe, accurate and speedy delivery. It also does a great many other things: at post offices, pensions to old people and widows are paid, insurance stamps are sold, licences for keeping dogs and wireless sets are issued, orders are sold by which money can safely be sent through the post. The Post Office also handles the sending and delivery of telegrams and the whole gigantic system of telephones as well as that of cables and wireless

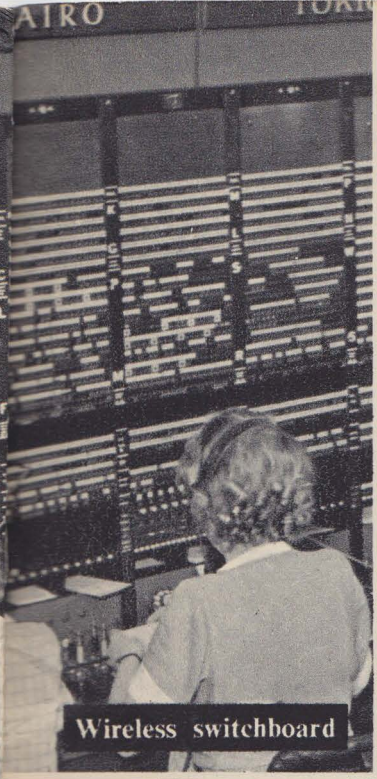
Stamps for a few of the 6,000,000,000 letters



Telephone wires in the "Exchange"



Christmas parcels



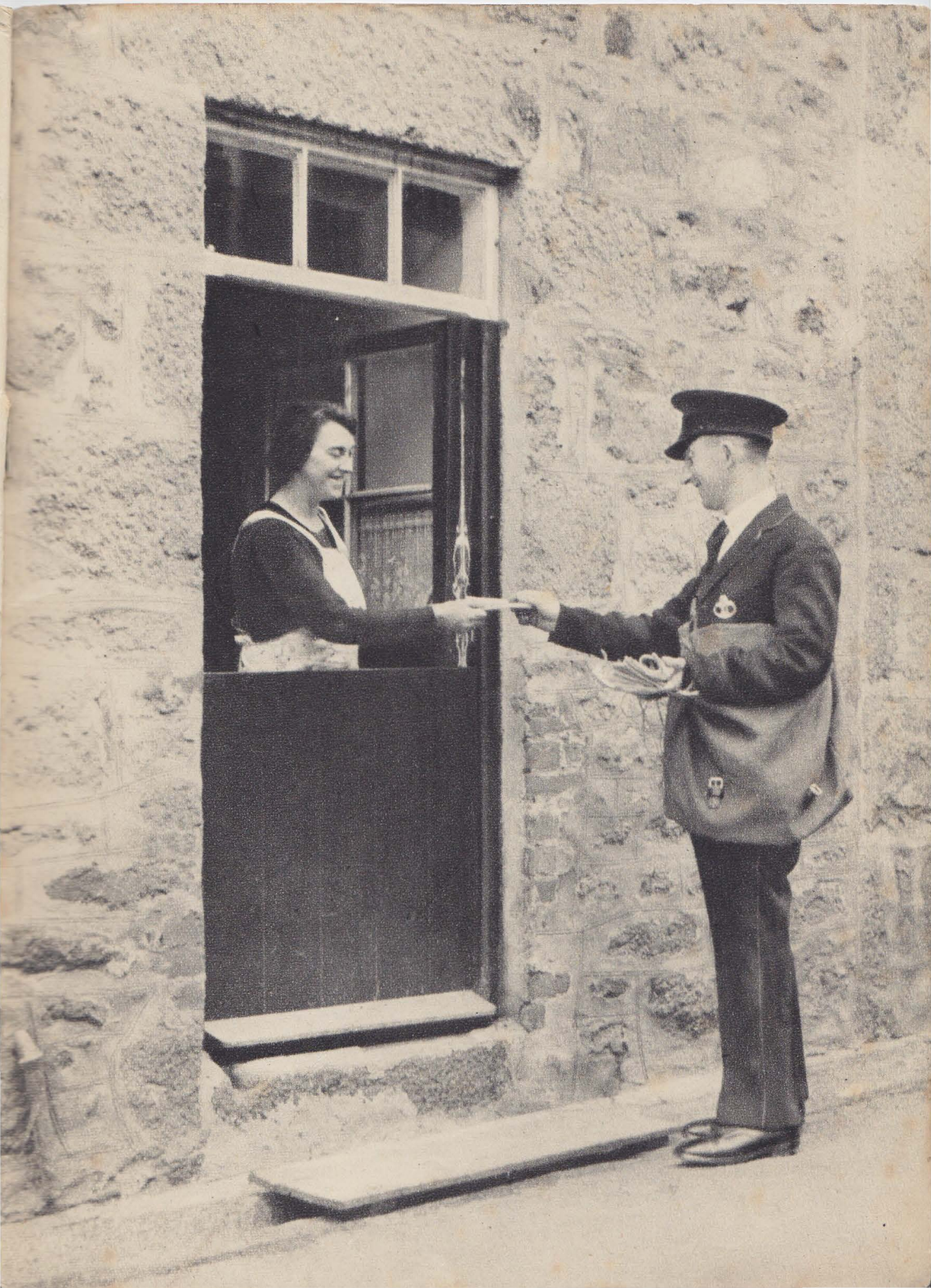
Wireless switchboard

Telephone wires by the roadside

overseas. Besides all this, there is the Post Office Savings Bank which holds the accounts of 17,750,000 depositors and receives the people's savings at the rate of over £150,000,000 a year; and the vast organization of the National Saving Certificate Department, which looks after the transactions of the 17,000,000 people who have purchased certificates worth £2,200,000,000.

The whole of the British Post Office Organization is controlled in London, the head of it, the Postmaster General, being a member of the Government. He has under him 300,000 workers, as well as engineering equipment which cost about £260,000,000, a fleet of 18,000 motor vehicles, and stores of all sorts of materials ranging from 4,000,000 buttons for postmen's uniforms and 1,000 tons of string for fastening mailbags, to 20,000,000 miles of wire—sufficient to encircle the earth 800 times—for the use of the telegraph, telephone and cable systems.

But vast as this organization is, its methods of working are always straightforward and simple. The letters which Mary MacDonald sent to Cornwall and the Middle East are as certain to be delivered as if she had been able to take them herself. She dropped one of them into the red letter box at the corner of the street and passed the other across the post office counter, without the faintest misgivings or any fear that they might be "lost in the post," delivered to wrong addresses, or mutilated en route. And she knew that both would be delivered in the shortest possible time.



BRITAIN ADVANCES

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2. **LANDMARKS GIVEN TO THE PEOPLE** — **by Eric Parker**
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