DEFEATING THE U-BOAT MENACE

New Zealander's Successful Invention

NEW ZEALANDER who worked in a hardware shop in Dunedin forty years ago, is to-day helping the American Navy to solve one of its toughest problems — complete secrecy regarding the whereabouts of merchant ships at sea. He is E. H. Scott, 51-year-old president of the E. H. Scott Radio Laboratories of Chicago, builders of the Scott radio, which has a reputation in the United States as one of the highest quality receivers on the

His latest invention, now being put to good use by the United States Navy, is a receiving set which will not oscillate and betray a ship's presence. Many oldstyle receiving sets on American ships were built in Great War days, and their oscillations are capable of warning any submarine within 25 miles. The problem was put to the radio manufacturers of America, and Mr. Scott can boast that his laboratories were the only ones to solve it.

E. H. Scott was born in Dunedin

in 1889, and was educated at the South Kensington School, Both his parents died when he was quite young, and at the age of 14 he left school to work in hardware stores, continuing, however, with night classes at the Dunedin Technical College. He was a mechanically-minded lad, and saved up his money to buy a motor-cycle, a vehicle which was even then capturing the imagination of youths with a flair for mechanics and a craving for speed. It was the fourth motor-cycle imported into New Zealand and on it he won one of the first motor-cycle races held in Dunedin.

In 1907, he decided to see the world, and as a start worked his way to England. In Coventry he got a job in a motor works, and was successively mechanic, car tester, and car and chassis examiner. Meanwhile he was studying combustion engine design, hoping to advance still further to a position as engine designer. But he became homesick and returned to New Zealand to marry a Dunedin girl and take a job managing the Canterbury branch of a cash register company. The outbreak of war found him in Australia with the same firm, and in 1915 he enlisted with the Third Australian Division and served in France on the Somme until the end of the war.

First Successful Invention

It was while he was in the Army that he had his first success as an inventor, his invention being a device to locate trouble in petrol engines. It was adopted extensively by the United States Army, and the lucky inventor came out of the deal 56,000 dollars to the good.

After the Armistice he went to America to commercialise his invention. and as a sideline wrote articles on automobile care and, in book form, sold 100,000 copies. In 1920 he turned to radio, writing a daily article for the same group of newspapers which carried his automobile articles. He originated the system of pictorial wiring diagrams without which the many radio journals which flourished during the adolescence of radio in America would have been unable to explain to amateurs how to build receivers at home.

Return to New Zealand

In 1922, Mr. Scott returned to New Zealand, bringing with him a receiving set which he had just designed. Before leaving he had arranged with WGN and WQJ, two Chicago stations, to send out a special test programme, notice of which was given to amateurs throughout Australia and New Zealand. Mr. Scott's receiver was the only one to log programmes from both stations. With this set, he discovered, it was a simple matter to pick up American stations in New Zealand every night in the week—this in days when reception of stations 1,000 miles away was creditable, and reception over 6,000 and 9,000 miles was a phenomenon. While it was in New Zealand Mr. Scott's receiver put up four world records.

Back in the United States Mr. Scott found that these records had attracted wide attention, and the upshot was that he went into the radio business, with a lad of 16 and himself as the entire staff.

GUARDING OUR COASTLINE

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wash before breakfast, which has been engaging the cook's attention since well before daybreak. After breakfast comes the official parade of the day. There's little spit and polish (the rank and file of the Army breathe a daily prayer of thanks to the man who designed the modern brass button-less battle-dress), and it's mainly a matter of seeing that equipment is in good condition and rifles clean. After that, comes a quarter of an hour of rifle exercises, just to keep him up to scratch in this department Once a week there is the usual foot in spection and a check up on clothing or equipment which may need repair or renewal.

The parade over, he and his platoon proceed to weapon pits, strong points, or whatever work is on hand. There is always plenty. Trenches have to be revetted and camouflaged, protective works must be constantly attended to and improved, more slit trenches must be dug, strong points must be protected with more barbed wire. At midday, during the summer, there was a swim parade before lunch, though these autumn days the chill in the water daunts all but a few. Lunch is plain and quickly over, and consists of bread, cheese, butter, jam, tea and maybe soup. From mid-day to three o'clock is a rest period, and the chances are that Private Munro will be very ready to flop down in his bunk and go to sleep for a couple of hours. And any civilian who thinks that giving troops a rest period in the middle of the day is 'coddling'' them, should try the life for himself. What with periods of standing-to, sentry duty and alarms, Private Munro will be lucky if he averages five and a-half hours' unbroken sleep a night.

It's Hard But Healthy

After the rest period, it is back to work until 1700 hours, or five o'clock in the afternoon. Dinner follows at about six o'clock, depending on the enthusiasm of the cook. After dinner is another half-hour stand-to, then a compulsory shower parade and a free period for reading or writing or listening to his radio.

Every week he will get a few hours leave, during which he can sample the life of the nearest town. He may not bring back to camp any liquor that he does not carry inside him.

It is not, as I have indicated, an easy life, though Private Munro didn't expect an easy life in the Army. That it is a



NO DESCRIPTION of Army life is complete without a picture of the cook. This cheerful young man peels potatoes for a whole platoon and will serve them up for dinner in half-a-dozen different ways

healthy one is evident from the record of one platoon whose quarters I inspected. In 10 weeks, I was told, there had been only three cases of illness-one of appendicitis, one of pleurisy, and one of mild pneumonia. Plus, of course, a small number of inevitable aches and pains.

One thing Private Munro does feel the need of is organised recreation. Some days, his platoon amuses itself by kicking a football up and down the beach, but sports equipment is not easily come by. He expects that soon this problem will be overcome.

Private Munro doesn't go round agitating for things, however. He does his job patiently, makes the best of his conditions and surroundings, and trusts that some small comfort will be added to his platoon next week and something more the week after that. In the meantime, he leaves most of the worrying to his platoon commander, and works away converting corners of beaches into wicked-looking pill-boxes and green paddocks into well-concealed nests for machine-guns and the whole coastline into a potential fury of hot lead for any invader who attempts to set foot on it.

---J.G.M.



Helping the American Navv

And so started a business that has grown into a world-wide organisation, with owners of Scott receivers in 153 foreign

Recently, when he has not been busy making equipment for the United States military forces, Mr. Scott has been acting as chairman of the Mid-west Division of the Anzac War Relief Fund. which collects money for comforts for New Zealanders and Australians on active service. Last Christmas money was cabled to the New Zealand Patriotic Fund for 1,200 Christmas parcels and 120,000 cigarettes.

Still very much a New Zealander at heart, Mr. Scott had practically completed arrangements to retire from business and return to the Dominion when war broke out. Retirement is now a distant dream.

30th Night Operation

["I will have done my thirty night operations in the near future. Then I'll have a spell. I'm beginning to think I need it. At present nothing seems very real except our jobs, and they are real enough. It's a funny feeling, a sort of apartness."—From a letter from an R.A.F. pilot.]

I SOUGHT to fling the doors of life apart,
Within the walls of living loss myself.
Slake my dried lips with sensuous ecstasies,
Bee-like to store nectar of sight and sound. But I am blind-insensate, deaf and Μy day is ever night: I wake to dream.

Those I once knew and loved are shadows new,
And I am rock, embedded in strange seas Of pallid unreality.

ONLY these are real:
Black night that presses like a
pail about us,
Chill cold whose bite is toothed Chill cold whose pite is aronaed ferocity,
Power controlled beneath my hands and feet,
These pallid dials whose solemn stare is life,
The shock, the stark, sharp flash of bursting shell, Fireworks of hell, target below . . . "Bombs gone?" The red that blooms behind us monstrously,
Dawn wind, dried swest upon my brow. ---K. E. Goulter