

# Radio Round the World

THE latest statistics to hand give the following interesting figures regarding the B.B.C.:—Paid licenses, 2,506,300; free licenses for the blind, 12,772; a total of 2,519,072, being an increase of 211,772 during the last year. Twelve and a half per cent. of the fees is taken by the Post Office for the cost of collection.

IT is commonly supposed that many European countries, and especially Germany, are countries of technicians, where radio is not only thoroughly understood but where conditions such as those in England are closely approached. However, this is not the case. Germany in many technical matters is far ahead of other countries, but strangely enough this is not the case with radio.

THE United International de Radiophonie will shortly have to tackle the problem of the allocation of the few remaining long wavelengths. In all, there are only seven channels available for broadcasting, but thirty stations are asking for them. It may be taken for granted that England will not relinquish the one long wavelength in use there, that of Daventry, 5XX (1604.3).

AS regards the medium wavelength the situation is even more difficult than the one which was dealt with previously. According to the Washington conference broadcasting has to be fitted into a wavelength band between 2500 metres and 545 metres. One hundred and three channels are available in Europe, while there are well over 200 stations.

UNTIL recently most of the Australian long-distance relays have been carried on by land-line relay. Now a series of experiments are being conducted with direct relay from one station to another. Some fine results have been obtained, including the relay of Toti del Monte's wedding. This was broadcast from 2ME on short wave, picked up by 4QG, and rebroadcast with perfect quality.

DURING the rebroadcast from 3YA of the landing of the trans-Tasman flight a local dealer operated a loud-speaker at his door. Crowds gathered to hear the reception of the airmen in Christchurch, although it was estimated that the Heeney-Tunney fight attracted larger numbers. The time of day and the fact that at any moment it might be heard that a New Zealander had brought honour and glory to the country probably accounted for the larger assembly at the fight.

THE chairman of the Federal Radio Commission (America) issued a forceful statement recently: "On all bands it is conceded that, for the general public interest there must be fewer stations. The fulfilment of the law implies more than mere local interest, likes and dislikes. In major consideration the problem is a national one. For the good of the whole country not so many stations will in future be licensed."

CANADA has six exclusive and twelve shared channels for broadcasting as compared with 77 exclusive and twelve shared channels in America. It has only 5.5 stations per channel, as compared with 7.7 in the United States. The population of the States is twelve times as great as that of

Canada, and the number of radio sets twenty times as large.

RAPID strides are being made by two large research laboratories in the United States in the development of an improved method of broadcasting which will give much better quality and will permit narrower wave bands to be used. This means that interference will be minimised. There will be more room for broadcasting stations on the air and a smaller number of valves will be required in the transmitter.

IT has been discovered that the position and altitude of the sun influences the route by which the radio waves prefer to travel. For instance, during the morning period in England the waves generally prefer to go from England to Australia in a westerly direction across the Atlantic, following the great circle along the longer route which is approximately about 14,000 miles. During the evening the waves prefer to travel by the shorter great circle route, across Europe and Asia, a distance of 12,000 miles.

A NEW multi-valve receiver was installed at Balmoral Castle for the King's recent visit. The cables reported that he spent many of the evenings listening-in. His Majesty has had a set at Buckingham Palace for some time, and is said to make much use of it. At a wireless exhibition some time ago he complained to a manufacturer's representative that the set would not cut out 2LO. Arrangements were promptly made to provide him with one guaranteed from this defect.

NEGOTIATIONS have been completed for the acquisition of a large tract of land for the site of the new high-power regional scheme broadcasting station for the B.B.C. The estate (Bookman's Park) takes its name from the family which held it in the reign of Henry IV. John Lord Somers, the famous Lord Chancellor, lived in the old house on the estate, but it was burnt down thirty-five years ago.

THE Government of France has tabled a Bill regulating wireless transmission in that country. The Bill asserts the principle of State control of transmitting stations which may either be worked by the State itself or be leased out for a period not exceeding ten years. One provision of the Bill is to impose a tax to meet the expenditure of the new broadcasting department.

A CURIOUS story appeared in the English Press recently from Hatteras, North Carolina, where it appears oysters were humming so merrily during the month of May that certain wireless under-water experiments had to be abandoned. Apparently, the delicate mechanism used by the experimenters was put out of gear by the noise caused by the oysters. The experimenters applied to the Bureau of Fisheries for relief, but it appeared that the Government office announced that it could give no remedy to make oysters stop singing!

IN the Argentine, the value of broadcasting has been recognised, and Buenos Aires alone possesses eight stations. Of these, usually not more than two transmit at the same time. Broadcasting in Argentina is largely in the hands of amateurs, and at present no license fees are charged to listeners, but it is likely that it will be reorganised on systematic lines.

SOUTH AFRICAN broadcasting has had a chequered career during its short life. In 1924 the Government granted licenses for public broadcasting stations to the Capetown Publicity Association, and other similar bodies. Although reasonable license fees were charged, "piracy" (i.e. the use of unlicensed listening sets) was rampant, and gravely affected the financial success of the stations. Two stations managed to keep going until, in 1927, a Broadcasting Company was launched, and purchased them in addition to re-starting one of the closed stations. This manoeuvre has proved successful, and now extensions on the lines of the English system are planned.

IN an experiment carried on recently, phonograph music was sent across the Atlantic, back and rebroadcast. The signal was first sent out from Schenectady over shortwave station 2XAD. This was picked up at Chelmsford, England and fed into the short-wave transmitter of 5SW, which sent the signal back to Schenectady. Here it was picked up and retransmitted on the broadcast band. When picked up the rebroadcast was noticeably free from static and interference.

IN the recent aeroplane flight by Captain Kingsford Smith from the United States to Australia, the Fijian wireless station (now being modernised) proved of great value to the aviators, for besides the transmission and reception of messages, direction finding signals were also transmitted by Suva radio and were helpful in guiding the plane to its landing in Fiji.

EXPLORATION for oil in Papua (New Guinea) has made big demands on wireless communication, as has also the rapid development of the gold fields in New Guinea. Small transmitting and receiving sets were installed for a number of expeditions, to enable the explorers to maintain direct communication with headquarters at Port Moresby. These have been found to work very satisfactorily, and to lessen appreciably the dangers and risks of the exploring parties.

WITH regard to the broadcasting of pictures, the B.B.C. and the German broadcasting authorities take similar attitudes. While taking the liveliest interest in the various inventions for picture transmission, and watching with sympathy the experiences gained in every quarter, they do not feel that the moment has arrived to support preferentially any one of the systems. There is a danger that if alterations in a transmitting system were introduced, apparatus purchased by listeners and themselves might become obsolete.

All facilities are given to inventors to further develop the technical side of picture transmission and reception.

A QUESTION was asked in the House of Representatives (N.Z.) as to the reason why amateurs wishing to operate on short-wave telephony should be compelled to pass an examination in Morse. In reply it was stated that as there are so many stations, including stations capable of sending Morse only, operating on high frequency, it is impossible to allot frequencies sufficiently separated to prevent interference. It was possible that a short wave telephonist operating on the same wavelength as a morse commercial station could cause great inconvenience, and unless the operator was proficient in morse reception he would be unable to be informed of the fact.

THE first paid message sent by the Marconi system was on June 3, 1898. This historic message was sent by Lord Kelvin, who was at that time visiting Marconi's experimental radio station on the Isle of Wight in company with Lady Kelvin and Lord Tennyson. Lord Kelvin showed his appreciation of Marconi's work and his belief in its commercial future by sending four messages and insisting on paying a shilling for each of them. The first message was to Sir George Stokes, and read: "Stokes, Lensfield Cottage, Cambridge.—This is sent, commercially paid, at Alum Bay for transmission through ether, one shilling, to Bournemouth, and thence by post and telegraph, thence to Cambridge.—Kelvin."

THE regional system (B.B.C.) provides for the erection of a limited number of high-power twin-wave transmitters to replace the present comparatively large number of low-power stations. The areas served can no longer be extended by erecting more stations in view of the restricted number of wavelengths available and the inevitable interference between home and foreign stations. The present system restricts listeners with simple apparatus to the reception of one programme. Great Britain has the use of ten wavelengths and the regional scheme is designed to use them to maximum advantage by giving the greatest possible number of listeners uninterrupted service of two programmes.

UNEXPECTED results are being obtained in the broadcasting of a series of ghost stories from 3LO. One story concerned an inventor who was shut in a mysterious country house, in which he had secreted himself to carry out experiments with a new type of valve. A partner, some distance away, awaited to hear him transmit the news of his success. Of course, the house turned out to be haunted, and the waiting listener heard his friend's frantic plea for help against unknown forces in the sinister house. To heighten the effect, 3LO announced that it had picked up the station and desired help to be sent to the unfortunate inventor, giving a fictitious account of the position of the house. Evidently tuning in at this point, several listeners misunderstood the purpose of the message, and mistook it for a real life drama. One amateur transmitter actually broadcast the appeal for help, and rang up 3LO to learn the outcome.

A DIRECT radio telephone service has been opened up between Holland and the Dutch East Indies.