

once again to the question of their present condition and their future. Difficulties of the situation, which contribute to the failure to find a solution of a problem—for long a reproach to the Australian people—are set out with due appreciation of their weight by an Australian correspondent of *The Times* in an article in the issue of November 25. After pointing out the gravity of conditions which tolerate “tribe after tribe dying on their feet”, and contrasting conditions among the natives of New Guinea, the writer refers to the mentality and character of the aborigines as in no small measure responsible for much of the failure of the Governments to check the degeneration which is taking place. Even such a beneficial, and indeed essential, provision in the organization of aboriginal protection as medical attention is rendered in a degree ineffective through the disinclination of the aboriginal to take advantage of it, owing to magical belief or misunderstanding. At the same time the nomadic habit, as well as the tendency to drift to centres of white civilization, neutralize the advantages of reserves of aboriginal lands. On the other hand, the inadequacy of the financial provision made by the Australian Governments is stressed, its most serious consequence being the lack of a trained body of special officers, such as the service organized by Sir Hubert Murray in Papua. A graver indictment of the Australian people appears in the same issue of *The Times* in the form of a report of a valedictory address by Prof. F. Wood-Jones to the Victorian Anthropological Society, which, notwithstanding a certain lack of restraint in language and certain inaccuracies, cannot be passed over by Australia as ill-founded, even though Prof. Wood-Jones, as well as the writer in *The Times*, as has been pointed out in subsequent correspondence, gives little or no credit to Federal and State Governments for what has been attempted to ameliorate aboriginal conditions.

Marconi School of Wireless Communication

QUITE early in its history, the Marconi Company experienced a need for providing its recruits to the engineering and operating staffs with some centralized instruction in the technique of wireless communication. This technique was naturally ahead of any training provided by the universities or elsewhere, and, accordingly, a residential school for the training of probationary engineers of the Marconi Company was opened in 1901. This event established a notable precedent in industrial training institutions. From this date, the School has been in nearly continuous operation, with modifications and expansion of its activities from time to time to meet the demands presented by the progress in communication. Some two years ago it was decided to make very substantial increases in the facilities provided, and on November 29 last, representatives of the technical press were invited to inspect the new buildings and equipment of the Marconi School of Wireless Communication at Chelmsford. Its premises have been rebuilt and equipped on modern lines, its curriculum has been reorganized and additional appointments have been made to the staff.

As a training institution, the School is a leading example of the higher industrial education, and provides the link between the universities and the Research, Development and Engineering Departments of the Marconi Company. All engineering and physics graduates on their appointment as probationer engineers are given a course in experimental and applied wireless communication engineering at this School, which includes in its syllabus the application of circuit theory, the practice of valve, receiver and transmitter technique and experience in the design, construction and testing of representative aerial and feeder arrangements. A series of lectures is also given during the five months' session covering the whole field of wireless communication and a further series on engineering mathematics. The new School possesses a central college building containing the main experimental laboratory, two smaller research laboratories, a standards room, lecture theatre, library, common room, and general offices; and in the grounds are a number of detached buildings housing telephone terminal gear, direction finding plant, transmitters and television equipment. About sixty students are being trained at the present time; the lecture theatre has a seating capacity for seventy-five students and many more than this number can be accepted for work in the various experimental sections of the School. A hostel, with a limited accommodation, is available for those students who desire to live near by. A more detailed description of the School and of the facilities which it provides is given by the principal, Mr. H. M. Dowsett, in the *Marconi Review*, No. 66, May–August 1937.

Iodine in Inorganic and Organic Chemistry

FOR his Friday evening discourse at the Royal Institution on December 3, Prof. Irvine Masson discussed “Iodine”. After a reference to the important part played by Sir Humphry Davy in the discovery of iodine (1812–1814) during his honorary professorship at the Royal Institution, the first half of the discourse reviewed the functions of this element in Nature. As a component of rocks, minerals, soils, and dissolved salts, iodine is widespread but is exceedingly scanty. Even in its chief commercial source, the nitrate deposits of Chile, its compounds are present only as minor impurities. It began to be significant, however, when organic life began. Certain marine creatures are rich in it, notably kelp, and in horny sponges (bath sponges) and those corals the skeletons of which are horny, not calcareous. In them, the iodine is in the skeleton, as a well-defined organic compound, di-iodotyrosine, closely related to the fairly simple compound tyrosine, which is a frequent constituent of proteins. Whether the organic iodine is useful to the vital processes of the cell-colony has not been ascertained. The same substance is one of the two iodine compounds in the thyroid gland; and although it there seems to have little or no direct physiological activity, it appears to serve as the chemical forerunner of the other and more complex iodine compound, which the gland evidently synthesizes from it, namely, the hormone