

defined with precision. None the less, this report deserves the most careful attention on the part of all concerned with the pressing problem of road safety.

### Domestic Oil-heating

"BRITAIN Turns to Oil Heat" is the title of an anonymous but significant contribution to the combined summer and autumn (1959) number of the *Esso Magazine*, house organ of the Esso Petroleum Co. Domestic heating by oil is increasing rapidly. Just after the War there were 5,000 houses with oil-fired central heating; in 1957 there were 16,000; and in 1958, 40,000. Similarly, portable oil heaters have increased in popularity from 2½ million to more than 10 million in the past five years. Perhaps the most interesting information in this article, especially in view of recent publicity given to fatal accidents with oil heaters, is quoted from a consumer's association. Ten different models were burned together in a room for several hours without creating odour. They were then knocked on their backs to see if they would spill burning oil; but in every case the flame either went out or returned to normal burning when the heater was set up again in correct position. Finally, the models were subjected to blasts of air to see whether flames would burn in a dangerous manner. In no case did anything catch fire, a remarkable result and tribute to the various heater designs involved.

### Parametric Amplifier Diode

'EW97/1', a variable capacitance diode designed for use in parametric amplifiers at frequencies up to S-band, is now in production by the General Electric Co., Ltd. (Semiconductor Division). The Company claims that it is the first device with these qualities to be made available in the United Kingdom. The price is considerably lower than that of the units which previously had to be imported. The diode is suitable for use in radar and other communications systems. Designed for high power dissipation, it needs no elaborate precautions against surges. It is mounted in a coaxial structure for direct insertion into coaxial and wave-guide circuits and it has the very low series inductance of 0.5  $\mu$ H. A reverse polarity version ('EW98/1') is also available. Because of its very low forward impedance and very high reverse impedance, the device can be used as a micro-wave switch. Another application is as a frequency multiplier—an important aid towards the future design of micro-wave receivers based entirely on solid-state devices.

### Palaeolithic Remains at Willendorf

EVERY prehistorian knows of the Venus of Willendorf, and some of them know that the figurine comes from a site near the village of the same name which lies on the left bank of the Danube between Melk and Krems, upstream from Vienna. The figurine itself is made of a fine-grained oolite, is some 10 cm. in height, and is highly conventionalized. It can be dated to a late palaeolithic epoch. But up to now very little detail has been generally known about the find, the site itself, and the associated industry. Now three fascicules of the Prehistoric Commission of the Austrian Academy of Science have been devoted to these matters (*Mitteilungen der Prähistorischen Kommission der Österreichischen Akademie der Wissenschaften*. VIII und IX. Band: Willendorf in der Wachau: Monographie der

Paläolith-Fundstellen I-VII. 1 Teil: Text. Pp. v+219. 2 Teil: Inventar. Pp. 79. 3 Teil: Abbildungen. Abb. 124. (Wien: Österreichische Akademie der Wissenschaften, 1959)). At Willendorf there are a number of loess sites which have yielded upper palaeolithic industries; the famous figurine came from site 2. The first fascicule includes a full account of the sites and the various excavations that have taken place there; Part 2 is a catalogue of all the finds of stone and bone tools that have been unearthed; Part 3 is entirely taken up with pictures of the more important tools, which enable datings for the various levels to be suggested. A work of this nature is long overdue. Now at last prehistorians have the full facts connected with one of the more important works of art of late palaeolithic man that has survived.

### The Transvaal Museum

THE annual report of the Transvaal Museum, Pretoria, for the year ended March 31, 1959, once again directs attention to the desperate need for more accommodation. The Trustees consider that the people of South Africa have been unduly penalized in that large sections of the collections in both the natural sciences and history are steadily deteriorating owing to lack of storage and display space. Proposals for a separate and independent cultural history museum and an open-air historical museum are also being discussed at a high level with the Minister of Education. An entrance charge (1s. per head for adults but free for children under sixteen and recognized groups of students) has been made. The revenue is devoted exclusively to the improvement of the collections, and it is interesting to note that the decrease in attendances is not nearly so great as was expected.

### Student Exchange

DURING the summer vacation of 1959 the number of students sent and received under the programme of the International Association for the Exchange of Students for Technical Experience of Great Britain increased to 854 students received, and 837 students sent; the corresponding figures for 1958 were 829 and 774, respectively. Some 366 British companies took part in the scheme. In April 1959 a general meeting of representatives of affiliated universities, colleges and companies was convened to consider the future organization of the Association, in Great Britain. It was decided to establish an independent council to control the Association, and the legal formalities are now proceeding. It is anticipated that the new Council of the Association will operate from September 1960. Greece has been accepted as a full member of the Association, and Poland and Tunisia have been admitted as associate member countries for one year. Further information about the Association can be obtained from J. Newby, superintendent of vacation studies, Imperial College of Science and Technology, London, S.W.7.

### Scottish Field Studies Association

THE Scottish Field Studies Association has announced its programme for the forthcoming season April-September. The courses will be based on the Garth Field Centre and the Isle of Ramsey, and accommodation fees will be up to 4½ guineas a week. Members of local scientific societies qualify for bursaries of £3 (for a course lasting a week) from a