and factual account of the problems involved. The first part comprises an account of dolomite caves in general and of their infilling. This part will perhaps be of greater interest to the geologist, but the pre-historian is unwise if he puts these matters completely on one side. Part 2 gives a detailed account of most of the known sites-Sterkfontein, Swartkraus, Kromdraai, Coopers B, and the Makapan limeworks. In a final chapter a correlation of the deposits in the various sites is given and their ages suggested. Using the Leakey fourfold system of pluviations, it would seem that these early beings must be assigned to a period between the Kageran and the Kamasian pluvials, that is to say, to the first inter-pluvial, except for Kromdraai, which is slightly younger and dates to the second pluvial period. If they are certainly human and an association with true artefacts can be proved, they are indeed the earliest remains of our species so far discovered. The appendix by R. F. Ewer lists the faunal remains found.

## Bibliography on the Chemistry of Tobacco Smoke

"The Constituents of Tobacco Smoke: an Annotated Bibliography", edited by H. R. Bentley and E. G. N. Berry, is the third in a series of research papers published by the Tobacco Manufacturers' Standing Committee (pp. ii +49. London, 1959). This publication, with its attractive format, contains more than 600 references on tobacco smoke, drawn from the technical literature of the world on that subject. The earliest reference quoted is to a German work of the year 1826. There are eight sections, dealing with nicotine, bases, acids, phenols, hydrocarbons, neutral fraction, arsenic, and a miscellaneous section which includes such diverse components as trace minerals, carbon monoxide and free radicals. Each section is preceded by a short introductory comment. While nearly 200 substances are quoted as occurring in tobacco smoke, the editors wisely point out that the degree of precision with which identifications have been made is by no means uniform, so that some of the work reported is of questionable reliability. This publication should prove very valuable to workers in the field of tobacco carcinogenesis, where an active search for carcinogenic factors of human significance is under way, proceeding from the proposed causal hypothesis relating tobacco usage and human cancer. The minute quantities of traditional carcinogens of the aromatic hydrocarbon class found in cigarette smoke are unlikely to explain the proposed special carcinogenic environment of the cigarette smoker.

## Books required for the "Oxford English Dictionary"

The Editor of the Supplement to the "Oxford English Dictionary" writes: "It has proved impossible to obtain copies of some works, now out of print, which would help in the preparation of the forthcoming Supplement to the 'Oxford English Dictionary'. Any readers who would be willing to give, sell or lend copies of any of the following are requested to get in touch with the Editor at: 40 Walton Crescent, Oxford.

## Announcements

THE Wenner-Gren Foundation for Anthropological Research has awarded Viking Fund Medals and Awards of 1,000 dollars to Prof. Raymond W. Firth (University of London); Prof. Henri V. Vallois (director of the Musée de l'Homme, Paris); and Dr. Jesse D. Jennings (University of Utah).

IT was announced at a recent meeting of the British Section of the Louis Rapkine Association that the Cross of Chevalier de la Légion d'Honneur has been awarded by the French Government to Dr. G. E. W. Wolstenholme, director of the Ciba Foundation, in recognition of the work he is doing for international co-operation in medicine and science and more particularly for Anglo-French collaboration.

THE Geological Society of London has awarded the Daniel Pidgeon Fund for 1959 in moieties to Dr. M. K. Howarth, who proposes to study the Alum Shales (Upper Lias) at Whitby with particular reference to the ammonite fauna, and to Dr. M. J. S. Rudwick, who proposes to undertake research into the functional significance of the morphology of fossil brachiopods.

Two open days will be held by the British Cast Iron Research Association during May 28 and 29. A number of special exhibits and demonstrations have been arranged. The first day is set aside for representatives of member-firms and for the Press. the second for representatives of Government departments, other research organizations, educational bodies, trade unions, users of iron castings, and others. Further information can be obtained from the Intelligence Department, B.C.I.R.A., Bordesley Hall, Alvechurch, Birmingham.

THE fifth International Salon de la Chimie is to be held in Paris during June 18-29 in conjunction with the fifth Rubber and Plastics Exhibition, the eleventh Exhibition of Laboratory Equipment and Instruments, the fifth Exhibition of Chemical Engineering and Protection against Corrosion, the fifth Industrial Heating Exhibition, and the first Literature and Press Exhibition. Further details can be obtained from the General Secretariat of the Fifth Salon de la Chimie, 28 rue St. Dominique, Paris 7e.

THE twelfth annual conference on Electrical Techniques in Medicine and Biology will take place in the Sheraton Hotel, Philadelphia, Pennsylvania, during November 10–12. It is sponsored by the Joint Executive Committee in Medicine and Biology, appointed by and representing the pertinent interests of the American Institute of Electrical Engineers, the Institute of Radio Engineers for its group on Medical Electronics and the Instrument Society of America. Proposals for papers are invited and should be submitted to Dr. L. E. Flory, RCA Laboratories, Princeton, N.J., before July 1. Such proposals should be 100-200 words in length, supplemented by a short biographical note, and include affiliation and company title.

ERRATUM. J. R. Hensler, Bausch and Lomb Optical Co., Rochester 2, New York, writes: "In my note, Synthesis of Colour Centres in Silica and their Thermoluminescence', published in Nature, March 7, p. 673, column 1, lines 3-6 should read: 'The quenching of the luminescence in the presence of the aluminium centres is evidence for the interaction of these and the ultra-violet absorbing centres'. phrase 'in the presence' was omitted".

<sup>&</sup>quot;J. R. Carpenter, 'Ecological Glossary', 1938.

R. T. Glazebrook, 'Dictionary of Applied Physics', 1922–23.

Oliver Heaviside, 'Electrical Papers', 1892.

Henderson and Henderson, 'Dictionary of Scientific Terms' (we have edit. 6, 1957; earlier editions required).

B. D. Jackson, 'Glossary of Botanic Terms' (any edition).

<sup>&#</sup>x27;Radio Engineering Handbook' (edits. 1 and 2), 1933-35.

A. L. M. Sowerby, 'Dictionary of Photography' (we have the 18th edit., 1957 impression; earlier editions needed)."