

himself into the study of the district, taking an active part in the proceedings of local natural history societies, and contributing extensively on archaeology and geology to both scientific and popular guides to the area.

Cobbold's first contribution to geology here was the description of a Silurian outlier of much tectonic significance under *Caer Caradoc*. He soon came under the spell of the thoroughness and accuracy of Charles Lapworth's work, and became infected with his enthusiasm for the ancient rocks. Lapworth's discovery of the *Olenellus* fauna in Shropshire, and Groom's find of *Paradoxides*, having demonstrated the existence of Lower and Middle Cambrian rocks in the Stretton and Wrekin areas, Cobbold proceeded to collect from these rocks inch by inch. His reward was the discovery of many forms new to Great Britain and to science. He described a dozen new genera and more than a hundred new species from them, and was able to divide the Lower Cambrian into eleven, and the Middle into nine divisions, mostly definite life zones.

Thus Cobbold made his area the type-section for Britain, correlated the rocks with those of America and the Continent, and demonstrated the existence of breaks in the sequence caused by earth movements.

He became our leading authority on Cambrian faunas, and was called in by the Geological Survey to determine the fossils collected by himself and others from the considerable Cambrian area between the Wrekin and Charlton Hill. His type-fossils have been lodged in the British Museum, the Geological Survey Museum, or the Sedgwick Museum.

The work that Cobbold accomplished with such conspicuous success could only have been carried out by one living on the spot, with abundant leisure and the knack of using it effectively, with remarkable energy, industry, devotion, and perseverance, with wide knowledge of his subject and its literature in many languages, and with the hand and eye of an artist.

W. W. W.

We regret to announce the following deaths :

Mr. Thomas Crook, O.B.E., since 1928 principal of the Mineral Resources Department, Imperial Institute, London, on January 6.

Mr. P. A. Ellis Richards, president of the Society of Public Analysts in 1922-23, aged sixty-eight years.

Sir David Semple, founder and first director (1900-5), of the Pasteur Institute of India on January 7, aged eighty years.

News and Views

Prof. E. B. Bailey, F.R.S.

THE Lord President of the Council has appointed Prof. E. B. Bailey, professor of geology in the University of Glasgow, to be director of the Geological Survey of Great Britain and of the Museum of Practical Geology, a post rendered vacant by the untimely death last year of Dr. Bernard Smith. Prof. Bailey previously served on the staff of the Survey for some twenty-seven years. After a distinguished career at Cambridge, where he gained the Harkness scholarship in geology, in 1902 he was appointed geologist to the Geological Survey of Scotland, with headquarters in Edinburgh, where he remained until 1929. During the years he served in Scotland, Prof. Bailey made a special study of the tectonics of the Dalvadian schists, a subject in which he became an acknowledged leader. He also took an important part in the survey of the tertiary igneous rocks in Mull, and edited the Survey memoir on this area. Other duties carried out during his years on the Survey included much work on the Carboniferous rocks in the Midland Valley of Scotland. His experience was further widened by visits abroad from time to time. Prof. Bailey's Survey career was interrupted by the Great War, during which he saw much service in France with the Royal Artillery, receiving the Military Cross, the Legion d'Honneur and the Croix de Guerre as rewards for distinguished services. His enthusiasm for geology was such that he even found time to publish papers on this subject during the time he was engaged on military service.

IN 1929, Prof. Bailey resigned from the post of district-director in Scotland, to take up his appointment to the chair of geology in Glasgow. During his tenure of this post, he has continued his researches into Highland tectonics, and has also developed the application of current- and graded-bedding to the question of the age of the Highland schists. Among the academic and other distinctions received by Prof. Bailey may be mentioned the following: from the Geological Society of London, in 1923 the Bigsby Medal, and in 1935 the Murchison Medal; in 1928, president of Section C (Geology) of the British Association; in 1930, elected fellow of the Royal Society; in 1936, awarded the honorary degree of D.Sc. by Harvard University at its tercentenary celebration. The results of the official work carried out by Prof. Bailey, and of his private researches, are contained in numerous memoirs of the Geological Survey, and in the publications of various learned societies. He is also the author of "Tectonic Essays: Mainly Alpine".

The Piltdown Jaw

IN another column of this issue of NATURE (see p. 120) reference is made to the reaffirmation by Prof. F. Weidenreich of the Cenozoic Research Laboratory, Peiping, of the orang-like character of the Piltdown jaw, which he relegates to the group orang-chimpanzee-gorilla, standing outside the line of human descent. In this connexion attention may be directed to another attack on the human character

of the Piltdown relic by Mr. Alvan T. Marston, which appears in *Discovery* of January. Here the basis of argument is the character and arrangement of the teeth, in which it is maintained the jaw is anthropoid and not human. The form of the canines, it is said, points to a gap between canines and incisors and an outside bite of the former, such as are found in the apes, but never appear in man, even in such an early and primitive form as Peking man. Similarly, such indications as are afforded by the Piltdown jaw on the order of eruption of the teeth point to the anthropoid, rather than the human, character of the dentition. The canine, instead of preceding the second molar, as in man, was here the last to erupt, and indeed, Mr. Marston infers, was still incompletely formed. Further, he concludes, the jaw shows no evidences of the adaptations for speech, for which capacity is to be inferred from the advanced character of the brain. When Prof. Weidenreich's promised monograph on the teeth of *Sinanthropus* appears, in view of the relatively large amount of evidence at his disposal, it may be anticipated that we shall learn whether the teeth show the variability, which he has found in the mandible, and whether it supports the evidence already available to Mr. Marston, on which he relies to no little extent in stating his case.

France and its People

IN "France: a Handbook for Beginners in French" (Cambridge: W. Heffer and Sons, Ltd. Pp. 48. 1s. net) are reproduced three lectures by Dr. Cloudesley Brereton, originally broadcast in Great Britain in December 1935 and January 1936 and afterwards repeated, at the invitation of the French Government, from Paris. The sub-title, in so far as it may tend to suggest that the pamphlet is unlikely to appeal to the general public, is misleading, for here is no mere catalogue of dry facts but a lively appreciation of the genius, to quote the author's own words, of a hard-working, cheerful, amiable, keen-witted, polished, social, artistic and, at bottom, spiritually-minded people. That it is eminently fitted to promote that mutual understanding and appreciation between nations which a strident modern nationalism threatens to stifle has been recognized by the judges entrusted with the awarding of the recently instituted "Prix internationaux du Tourisme". They have awarded to the author the second prize of 15,000 francs; the first prize, of 25,000 francs, having been awarded to Mrs. Brangwyn, an American, for "Everybody in Paris". As an example of Dr. Brereton's method may be quoted his comparison between French and English science teaching in secondary schools. Practical science is, he holds, rather neglected in the French *lycée*. "In the more abstract side of science, however, a very high standard is attained. Our schools possibly err in the other direction—somehow the glamour of science has rather been overshadowed by the excessive cult of the test tube in this country".

Archæological Expedition to Nubia

SIR ROBERT MOND'S appeal on behalf of the archæological expedition to Nubia projected by the

Egypt Exploration Society merits, and no doubt will receive, full measure of support. The valuable work of investigation which the Society has carried out at Tell el-Amarna under its present concession from the Egyptian Government, on a site which might have been thought already to have yielded its precious material to the excavator, is a warrant that the expedition will spare no pains on the new sites to secure that nothing of moment is overlooked which may throw light on the history and culture of this little-known part of ancient Egyptian rule. As Sir Robert points out in his letter to *The Times* of January 4, the two sites which have been reserved provisionally for the Society, Sulb (Soleb) and Sesebi in Upper Nubia in the region of the Third Cataract of the Nile, will both throw further light on the Amarna age, upon which the Society has been engaged now for some years. Their comparative inaccessibility accounts for the fact that they have been little studied; but it is known that at both these fortress cities there are remains which date from the reigns of Amenophis III and Akhnaton. The temple of Sulb is in fact described by Breasted, as quoted by Sir Robert, as "the most important monument surviving in the Sudan, and one of the two greatest architectural works surviving in the Nile Valley, the other being the temple of Luxor . . . We have in Soleb, therefore, one of the first creations of the Empire". As the temple has on its walls running reliefs which depict scenes from the Sed festival, to celebrate which Amenophis caused this temple to be built, its investigation will supply information as to ritual and belief which is unique. Further, as the two fortresses probably occupied the sites of earlier Nubian towns, some data, at least, should be forthcoming bearing upon the earlier population of Nubia, which, it will be remembered, the late Sir Grafton Elliot Smith held to be of considerable moment in the understanding of the early racial history of ancient Egypt.

Academy of Natural Sciences, Philadelphia

IN the course of the current month, the Academy of Natural Sciences, Philadelphia, will issue invitations to an international symposium on early man and the origins of the human race which is to be held in Philadelphia on March 18–20. This symposium will form part of the proceedings celebrating the one hundred and twenty-fifth anniversary of the foundation of the Academy. Among those who have already promised to contribute to the symposium are Dr. P. Teilhard de Chardin of China, Dr. Ralph von Koenigswald of Java, Dr. R. Broom of South Africa, Miss D. A. E. Garrod of Great Britain, and Dr. Kaj Birket-Smith of Denmark. The arrangement of the programme is in the hands of a committee which includes Dr. John C. Merriam, president of the Carnegie Institution, Washington, D.C., Dr. Edwin C. Conklin, vice-president of the Academy and president of the American Association for the Advancement of Science, Dr. George G. MacCurdy, director of the American School of Pre-historic Research, Dr. Hellmut de Terra of the Carnegie Institution and Dr. E. B. Howard,