

scripts of sufficient importance and authenticity would also be listed. Where, however, only incidental mention is made of plant localities, as in many of the standard floras of Britain and in monographs, these would be omitted from this section. The compilation will entail a large amount of research and will be possible only with the co-operation of helpers who have the requisite local knowledge of the literature of their areas. The editors are Mr. J. S. L. Gilmour, Mr. H. A. Hyde, Mr. H. S. Marshall, Mr. N. Douglas Simpson and Dr. G. Taylor. Those willing to help in this compilation should communicate with Mr. N. Douglas Simpson, Maesbury, 3 Cavendish Road, Bournemouth, Hants, indicating when they can begin work, in what areas they are interested and to what libraries and periodicals they have access.

Early Scottish Prehistory

It is doubtful whether it can be proved that any cultures earlier than the Mesolithic existed in Scotland. This is perhaps surprising, as there would seem to have been no climatic reason why Scotland should not have been habitable during the main interglacial epoch in the middle of the Great Ice Age in any event. Maybe the scanty populations of the Old Stone Age never reached the extreme north-western edge of the Old World. Mesolithic industries contemporary with those farther south have been unearthed at a number of sites. But many of the apparently Mesolithic industries in Scotland are actually much more recent in date and contemporary with the Neolithic or even early Metal Age farther south. Even in the Cleveland hills of Yorkshire, sites are known where pigmy tools of Mesolithic facies occur in real association with leaf-shaped arrowheads. Such an overlap of cultures is not surprising. The Neolithic civilization in Britain was rather due to the incoming of new modes of life than to hordes of invaders; in large part it was a case of 'neolithizing' the autochthonous inhabitants. Off the beaten track, the older culture continued to survive, influenced to a greater or less degree by the more advanced ideas spreading slowly over the land.

Much of our information of these early cultures in Scotland is due to the work of A. D. Lacaille, who is collecting a corpus of material for eventual publication after the War. Recently, he gave a paper to the Society of Antiquaries of Scotland on the stone industries associated with the raised beach at Ballantrae. The sites are in Wigtownshire and south Ayrshire, and the specimens were collected on the tilled surface of the raised beach, which itself dates to the period of the Littorina Marine transgression. With the specimens of Mesolithic facies were found others, Neolithic in appearance. The evidence would seem to point to the introduction there of the Neolithic civilization towards the end of the Atlantic post-glacial phase. Among the Mesolithic types of implements occur specimens which recall some found in northern Irish sites. Thus tanged points resembling those from the valley of the River Bann have been found. Mr. Lacaille's definitive publication will be awaited with interest. There is still a lot to be learnt about the cultural overlaps in Scotland and the various influences that went to form the earliest Stone Age cultures north of the Cheviots.

Archaeological Expedition to Mexico

THE War has forced the National Geographic Society to curtail its scientific field expeditions, but the archaeological studies that have been made

annually since 1937-38 in southern Mexico under the sponsorship of the Society and the Smithsonian Institution will continue. The seventh expedition, headed by Dr. Matthew W. Stirling, is on its way to the southernmost Mexican State of Chiapas where, digging into huge burial mounds and clearing dense jungle growth, he will continue to reveal some of the secrets of pre-Columbian civilization in this hemisphere. Dr. Stirling is accompanied by his wife, Marion Stirling, who is also an archaeologist, and Richard H. Stewart, staff photographer of the National Geographic Society. The expedition this year plans to conduct its studies in the mountains east of the Isthmus of Tehuantepec.

Social Implications of Engineering

ON March 28, Sir Harry Railing, president of the Institution of Electrical Engineers, delivered an address to the London Students' Section of the Institution, taking as his subject the social implications of engineering. Sir Harry stressed that it is essential for the engineer to grasp the inner meaning of his work and the mission he has to fulfil in his everyday life. To do this, a full appreciation of past achievements is necessary, and he must feel that, however small or large his contribution, he is a vital unit in a powerful living force. Material progress has been so remarkable that too little attention has been paid to the development of the lives of human beings. Humanity should have been trained and encouraged to accommodate itself to the increased impetus of science and engineering, so as to avoid a disastrous piling up of pent-up energy. Engineers should have foreseen these consequences more clearly and made the world realize that increasing material knowledge necessitates the acceptance of new responsibilities both on the part of the individual, the community and the State.

Sir Harry Railing does not believe in early specialization. When specialization becomes necessary, engineers should retain a broad understanding of the work of others in as wide a field as possible. Of the relative value of the methods most useful in engineering work, mathematics and physics are of paramount importance. But engineering involves also the handling of human beings, and it vitally affects their lives. A broader understanding of sociological problems is necessary, and if the engineer's work neglects the spiritual aspect it is liable to be a dismal failure. For the well-being of the community the scientific approach should be applied to social problems and politics, but its limitation should be borne in mind. Man is finite, not infinite, and from this should spring humility and tolerance of others.

Jubilee of the *Astrophysical Journal*

WITH the current issue of the *Astrophysical Journal*, this periodical completes its hundredth volume. Founded in 1895 by Hale as an international review of spectroscopy and astronomical physics, the *Astrophysical Journal* soon became the acknowledged medium for the publication of research, and especially of observational research, by English-speaking astrophysicists. Although the original plan of appointing collaborating editors from countries other than the United States has been recently abandoned, the international character of the journal is still attested by its contents pages. During the past fifty years such famous names as those of Cornu, Huggins, Belopolsky, Kayser, Schuster, Newall and Alfred Fowler have appeared beside those of their American colleagues,