

PROCEEDINGS OF THE PAN- AFRICAN CONGRESS ON PRE- HISTORY

A GENERAL account of the Pan-African Congress on Prehistory was published in *Nature* of February 15, p. 216. The following records the proceedings of the business meetings and supplements the former article.

Sixty-three papers were communicated to the Congress, and, in addition, four symposia were held, dealing respectively with "Pleistocene Marine Terraces", "Fossil Man in Africa", "The Hand Axe Culture in Africa" and "Fossil Apes in Africa".

Three sub-committees were set up to deal with problems relating to: (1) geology and general palaeontology, under the chairmanship of Dr. S. H. Haughton; (2) human palaeontology, under the chairmanship of Dr. A. Galloway; (3) prehistoric archaeology, under the chairmanship of Mr. A. J. H. Goodwin.

A number of important resolutions, arising out of the deliberations of these committees, were placed before the Congress in its final session and duly passed. The most important of these dealt with the question of terminology in the African Continent, and, among other things, it was decided that in future:

(i) The Hand Axe Culture in Africa should be referred to as 'Chelles-Acheul' with suitable regional prefixes, instead of using such terms as 'Chellean', 'Acheulean', 'Stellenbosch', etc.

(ii) That the term 'Tumbian' should be abandoned, as well as 'Kalinian' and 'Djokocian', and that in substitution thereof the term 'Sangoan', with suitable definitive adjectives, be used for the earlier stages of the culture formerly described by the above terms, and the term 'Lupemban' for its later stages.

(iii) That the use of the term 'Aurignacian' for the 'blade and burin' culture in Africa be abandoned in favour of the term 'Capsian' with suitable regional prefixes.

(iv) That the use of the terms 'Clacton' or 'Clactonian' and 'Levallois' or 'Levalloisian' to describe techniques of working stone be abandoned, and that these terms be confined only to describing cultures and that the techniques should, in future, be described as 'block-on-block' technique and 'faceted platform technique' respectively, with suitable definitive terms where necessary.

(v) That the terms 'Kageran', 'Kamasian', 'Gamblian', 'Makalian' and 'Nakuran' should be used throughout Africa to describe defined stratigraphical units, and based upon the established succession of faunas and deposits in East Africa.

Two permanent committees were set up to deal with the question of terminology in the fields of prehistory and quaternary geology respectively. It was decided that, in order to obviate the introduction of unsuitable terms into the literature of African prehistory, all workers should be invited to submit any suggested new names to the members of these committees for prior comment and advice. In this way it is hoped to avoid the creation of different terms for identical cultures in different parts of the Continent.

In its final plenary session, the Congress passed a number of resolutions addressed to Governments of countries in Africa, as well as to Governments of countries interested in research work of Africa, stressing the urgent need for further research work

in the field of prehistory and quaternary geology, as well as human palaeontology.

The Congress decided that, in view of the very important results achieved at this first Pan-African Congress on Prehistory, it was essential that the organisation should be set up on a permanent foundation. Rules and constitution were consequently drawn up and approved, and it was decided that a similar congress should be held at approximately four-yearly intervals.

While the Congress was in session, an official invitation was received from Field-Marshal Smuts for the Congress to hold its next meeting in the Union of South Africa in 1951, and this invitation was accepted.

The *Proceedings* of the Congress are now being prepared for publication, and many of the original papers that were communicated will appear in full. Advance orders for copies should be sent to the General Secretary, Pan-African Congress on Prehistory, P.O. Box 658, Nairobi, Kenya Colony.

RADIO-COMMUNICATION DURING THE WAR

AS already announced in *Nature*, the Radio Section of the Institution of Electrical Engineers held a Convention during March 25–April 2, at which about a hundred papers were presented describing the progress made in recent years in the subjects of radio-communication, broadcasting and certain types of navigational aids. The proceedings of this Convention, when published in the *Journal* of the Institution, will form a most useful record of wartime progress in radio research and development, complementary to that of the Radiolocation Convention held in 1946.

In his opening lecture on "Telecommunications in War", Sir Stanley Angwin gave some account of the remarkable achievements in this field in recent years, the success of which was undoubtedly due to very effective co-operation between the Government research establishments, the electrical and radio industry, and the Fighting Services.

The first three technical sessions were devoted to papers dealing with radio-communication over long distances and with the special problems encountered in the use of radio technique for military, naval and aeronautical communications. Owing to the limited range of radio frequencies which can be used for long-distance transmission, the band of frequencies allotted to each circuit must be used in the most efficient and economical manner possible. With this objective in view, considerable advances have been made in stabilizing the frequencies of radio-transmitters, in the use of single, in place of double, side-band modulation, and in the combined use of several adjacent narrow frequency channels keyed at a reasonably low speed for the purpose of sending messages between two points at very high speeds. In most forms of modern communication, whether for civil or military purposes, the radio-transmission path is merely a link connecting the land-line telegraph and telephone networks in the countries surrounding the terminal points. Recent developments have therefore taken account of the need for the systems of modulation adopted to be equally suitable for operating both the radio and land-line equipments.