

In future, the Royal Observatory is to perform part of the work hitherto done by the Compass Branch of the Hydrographic Department. After 1912 the observatory will prepare the declination charts, and will also collect the data available from land stations; the observations made on board ships will be collected and reduced by the Compass Branch and forwarded to Greenwich for incorporation in the charts. Additional responsibility is placed on the Astronomer Royal in the chronometer department also, and in future permission to submit chronometers and watches for the annual trials must be addressed to him directly.

Some interesting experiments were carried out on the effect of a magnetic field on the rates of chronometers and watches, and the results are soon to be published in the Monthly Notices (R.A.S.).

The chief feature of the meteorology of the twelve months was the breaking of several records, but details regarding these have already appeared in our notes columns.

EIGHTEENTH INTERNATIONAL CONGRESS OF AMERICANISTS.

THERE have been eighteen sessions of the International Congress of Americanists, but this is the first time that a meeting has taken place in the British Isles, though six years ago an enjoyable meeting was held in Quebec. Although some very good work has been done in the past on the archæology of Central America and Peru by several Englishmen, there are at the present day very few students of American ethnology, linguistics, or archæology in this country—indeed, it may be said that the number of those who pay any attention to these subjects is also small, and it is to be hoped that the visit of the congress will do something to kindle an interest in the past and present history of the American aborigines.

The congress was invited to London by the Royal Anthropological Institute, on which body has fallen the duty of making the necessary arrangements. H.R.H. the Duke of Connaught kindly consented to be the patron, the services of our veteran Americanist, Sir Clements R. Markham, were fortunately secured as president, Dr. A. P. Maudslay was chairman of the organising committee, Sir R. Biddulph Martin and the late Mr. J. Gray were the treasurers, and Dr. F. C. A. Sarg and Miss A. C. Breton the secretaries. The chief work of organisation was undertaken by Miss Breton, and the success of the meeting was mainly due to her untiring energy and her personal knowledge of the delegates. Owing to the courtesy of the University of London the meetings were held at the Imperial Institute from May 27 to June 1.

The programme consisted of the usual business meetings, papers, and discussions; Sir Richard and Lady Martin gave a reception on May 28, the president and committee received the congress at the Natural History Museum on May 29, and a dinner was given to the delegates on May 30. A visit was paid to the American collections in the British Museum, there were excursions to Cambridge and Oxford, and arrangements were made for a visit to the Blackmore Museum at Salisbury, and to Stonehenge and other places. A valuable feature of the congress was the exhibition arranged by Dr. Maudslay; it contained a large number of beautiful photographs of monuments investigated by him at Quiriqua, Tikal, Chichen Itza, Palenque, and Copan. Miss

Breton showed some of her masterly paintings of pottery and copies of frescoes, those from Acanceh, Yucatan, being of especial value, as the originals are now destroyed. Mrs. Zelia Nuttall exhibited a collection of photographs of documents and maps connected with Sir Francis Drake's last voyage. Mr. J. Cooper Clark lent a number of embroidered cloths from Mexico and Guatemala. Sir Clements Markham and others showed a number of antiquities, stone implements, pottery, and the like. Dr. A. V. Frič had a small ethnological collection from Gran Chaco. A very interesting series of paintings was exhibited by Dr. F. Heger, director of the Vienna Museum, which represent the mixture of races in Mexico; the subject of each picture is a father, mother, and child. The parents belong to different races or mixed breeds, and the progeny generally resemble one parent more than the other; each picture has an explanatory legend, and the whole series constituted a valuable demonstration in miscegenation.

The large number of the papers presented necessitated the holding of simultaneous sections, and the papers were grouped as follows:—

Palæo-anthropology.—Dr. C. Peabody directed attention to the archæological importance of the recent work of T. Volk in the gravels at Trenton, New Jersey. Dr. Ambrosetti exhibited a fossil skull and femur from Argentina; in the discussion it was pointed out that the skull was of the ordinary Indian type, with a slight amount of artificial deformation, the mineralisation was no criterion of age, and the position in which it was found did not prove a high antiquity. Dr. Hrdlička made an admirable report on ancient man in South America, in which he showed that there is no evidence of any extinct race of man that differs from recent man, and that proof is lacking of geological antiquity for man in South as well as in North America; he paid a high tribute to the zeal and honesty of the late Prof. Ameghino, but was unable to accept his conclusions. Miss Breton showed a photograph of an implement of Palæolithic type from the coast of Peru, and the question of a Palæolithic age in America was discussed by Dr. Capitan.

Physical Anthropology.—Dr. J. C. Tello demonstrated by means of lantern-slides the many methods of trephining practised by the ancient Peruvians; Dr. Hrdlička discussed the ethnic nature and probable origin of the American aborigines, in which he supported the generally recognised view of a sole Asiatic origin for them. A paper on Bolivian anthropology was contributed by Dr. Chervin.

Linguistics.—Dr. Waldemar Jochelson stated that the Aleut language is of Eskimo origin. W. Thalbitzer identified four Skræling words in Eirik the Red's saga as Eskimo, from which he inferred that the Eskimo probably peopled parts of Newfoundland in the eleventh century. Dr. F. Boas discussed the morphology and phonetics of the Mexican language. Dr. K. T. Preuss showed that the hitherto unstudied language of the Cora is structurally related to the Nahuatl. Among other contributions was one by Dr. S. A. Lafone Quevedo on the pronominal classification of certain South American Indian languages, and one by Prof. J. F. Oliveira on the language of the Cherentes of Central Brazil, a very primitive people.

A large number of papers dealt with the *Ethnology and Archaeology*, among which may be mentioned Prof. G. G. MacCurdy on shell gorgets from Missouri. Dr. Preuss indicated that thoughts and words are the intrinsically effectual part of the ceremonies and magic arts of the Cora Indians; the leaders of the ceremonies are called "thinkers"—they

practise fasting and abstaining from sleep as a means of attaining to right thoughts and promoting inspiration. Dr. Heger described a collection of objects found in ancient graves of the Diaguite culture in north-west Argentina which prove that the influence of the ancient Peruvian culture penetrated there in the time of the last emperors of the Incas. Dr. K. T. Stoepel recorded his investigations of some remarkable monuments on the Upper Magdalena River which probably antedate the Andaquies. Dr. Capitan demonstrated that the Maya architecture was a copy in stone of wooden constructions. Dr. Selser made several contributions, one of the most interesting being an account of the ruins of Uxmal, and Frau C. Selser described the painted potsherds from Cuicatlan and Teotitlan del Camino. Mr. J. Cooper Clark spoke about, and presented to members of the congress, his charming book "The Story of Eight Deer" in Codex Colombino. Dr. A. C. Simoens da Silva dealt with points of contact of the prehistoric civilisations of Brazil and Argentina with those of the Pacific coast countries.

Ethnology and Archaeology.—Prof. M. H. Saville gave an interesting lecture on archæological researches in the Andean highlands of Ecuador, Dr. Stoepel reported on an expedition to Colombia and Ecuador, and Dr. A. Posnansky discoursed on the ideographs of the Puerta monolith at Tihuanacu. Dr. W. Lehmann discussed in an able manner some Central American calendar problems, and Dr. Boas described the succession of cultures in the valley of Mexico.

General Ethnology.—Dr. Leo Sternberg filled up a gap in Lewis H. Morgan's Turanian-Ganowanian systems from tribes in the north-east of Asia. Dr. Jochelson described his researches in the Aleutian Islands. Dr. K. Sapper gave an interesting account of the daily life of the Ketchi Indians of Guatemala, and Jonkheer L. C. van Panhuys referred to the exploration of Dutch Guiana, and showed that the decrease of the Indians was due to the introduction of malaria by the bush-negroes.

Several papers were presented on *Colonial History*, the most important being Mrs. Zelia Nuttall's account of her discovery of the lost MS. of Cervantes Salazar's history of the conquest of Mexico. Enough has been said to show that a remarkable number of important papers were read which considerably advance our knowledge of the archæology and ethnology of Central and South America. The congress has happily passed beyond the time when speculative papers were offered, and it worthily fulfils its important self-imposed task of scientific research. A great many of the papers were illustrated by beautiful lantern slides, and Dr. Jochelson also showed kinematograph films. The congress was a decided success, and it was a great pleasure to English students to meet so many of their foreign colleagues.

A. C. HADDON.

THE ANNUAL CONFERENCE OF THE ASSOCIATION OF TEACHERS IN TECHNICAL INSTITUTIONS.

THE sixth annual conference of the above association was held in London during Whitsuntide, commencing Monday, May 27. The president of the association, Dr J. Clark (the Rector of the Kilmarnock Academy and director of Higher Education for Kilmarnock), in his address discussed at some length the factors which have raised the German nation to its present position in the industrial world. After dwelling upon the extent to which Germany

was indebted in the past to the teaching and example of England in commercial matters, he emphasised the important influence which the views and speculations of philosophers such as Fichte have had upon the development of the German nation. As a result of Fichte's "Addresses to the German Nation" published in 1808, "the doctrine of the submission of the individual and of self-sacrifice as a prime necessity for national development became an integral part of the German character, and established that flexibility and responsiveness to State control and official authority that have led to achievements no other nation has yet been able to imitate. . . . Education became not only the privilege of the individual, but a duty to the State in so far that it enhanced his national value. Hence originated that increased enthusiasm for education that caused the country to be described as a 'land of schools,' and prepared the way for immediate development on the technical side when the time was opportune."

Dr. Clark pointed out that we have still to create in the minds of the great majority of the inhabitants of the United Kingdom a genuine belief in the value and possibilities of technical education. Further, much work has yet to be done to convince the general public of the absolute necessity for a thoroughly sound general education as a basis for all higher education. The nation possesses one great advantage over other nations in the strong common sense and resourcefulness of the better type of British workman. "He displays a readiness, an initiative, and a responsibility that form a striking contrast to the lack of self-reliance, distrust in personal judgment, and need for constant direction that is so characteristic even of the superior type of German artisan. . . . When once the British industrial classes raise themselves educationally to the high level of the Germans, there should no longer be any doubt as to our commercial and industrial supremacy."

Papers were read by Mr. E. A. Atkins (Liverpool Technical School) on employers and the technical training of their young workmen, with special reference to a number of important recent developments in this question in the Liverpool district, and by Mr. C. B. Barber (Batley) on secondary education for technical students. Mr. Barber dealt mainly with the urgent necessity for the establishment of a number of "technical-secondary" schools, to supplement the existing "classical" or "literary" secondary schools.

Sir Alfred Keogh, Rector of the Imperial College of Science and Technology, in a paper which was read in his absence, explained the organisation of the Imperial College its aims, and the recent extensions of its work. He advocated a closer relationship between the Imperial College on the one hand, and the London and provincial technical institutions on the other. A marked feature of the discussion which followed was the belief expressed by many speakers in the necessity for the foundation of a separate technical university, consisting of the Imperial College as the central institution, with the principal London and provincial technical schools directly affiliated to it.

During the conference resolutions were passed (a) approving of the principles underlying Circular 776 of the Board of Education in so far as they encouraged the free development of the "grouped course" system and gave to technical institutions opportunities to conduct their own examinations; (b) deprecating the proposed abolition of the "external" degrees of the London University; (c) urging the necessity for the increased provision of scholarships (with adequate maintenance allowances) for technical students.