

the inevitable impoverishment of culture caused by contact with the white man, but also certain fundamental changes. The social organization of the older society, with its white and red officials for peace and war, conforms in general with that of other south-eastern tribes. The surviving remnant has lost this dual division, and has developed other features of which the most striking is a system of preferential mating; this has become linked with the matrilineal clans to which most members of the tribe still belong. The essence of this is that a person is expected to marry into one of his grandfathers' clans, but not into those of his parents, a state of affairs which was happily expressed by an Indian informant who said, "The Cherokees marry their grandmothers!" This system is unparalleled anywhere outside Australia, and its appearance is used to point the moral that a study of the historical antecedents of a tribe will not necessarily throw light on its present-day organization. A feature of this paper is a series of elaborate family-tree diagrams.

Another paper on the social and religious life of a dying Indian society deals with the Carrier Indians of the Bulkley River basin in British Columbia. It is contributed by D. Jenness, who spent about four months among them. A good account is given of the political organization, including the part played by clan and personal crests, and there is a brief summary of the life-cycle. The section on religion includes an interesting account of some hybrids formed by the impact of Christianity on the old beliefs, and the importance of dreams in the religious life of the people is stressed. The remarkable lack of historical sense among these people is shown in the impossible stories which they weave around events scarcely a generation old. The paper ends with an account of the medicine men, which includes a remarkable first-hand description of a ceremony for the cure of 'kyan sickness', a kind of hysteria involving cannibalistic cravings, to which these Indians seem particularly susceptible.

A paper by Robert F. Heizer on "Aconite Poison Whaling in Asia and America" gives a survey of whaling along the North Pacific coasts from Japan to Vancouver Island, which shows that three basic methods were practised. Netting is found mainly in Japan, the harpoon-line-float method is practised by the Eskimo and Chukchee in the Far North and is also found in the Vancouver - West Washington area, and spearing with a lance dipped in aconite poison predominates in the intermediate regions of both Asia and America. It is concluded that the poisoning method was used first by the Ainu and by the Kamchadal of Kamchatka, whence it is conjectured that it spread to the Aleutian Islands and the neighbouring part of the mainland of Alaska. It is probable that the movement was in this direction, but a word of caution is necessary since the link between the two areas is weak at its western end, because evidence for the ancient occupation of the Commander Islands is lacking.

In "The Quipu and Peruvian Civilization", John R. Swanton, arguing from quotations from the chroniclers, concludes that the quipu was used as a more extensive method of expression than the mere recording of numbers. From analogy with other high civilizations, he considers that Andean culture must have had such a mode of expression—a singularly unconvincing argument. It is suggested that the most highly developed quipus are likely to have been in public repositories which the Spaniards destroyed.

G. H. S. BUSHNELL.

FORTHCOMING EVENTS

Saturday, December 16

PATHOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND (joint meeting with the **BIOCHEMICAL SOCIETY**) (at the Royal Society of Medicine, 1 Wimpole Street, London, W.1), at 11 a.m.—Discussion on "Cancer".

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS (at Neville Hall, Newcastle-upon-Tyne), at 2.30 p.m.—Mr. D. MacFarlane: "Mine Ventilation with reference to Fan Types and their Application".

QUERETT MICROSCOPICAL SOCIETY (at the Royal Society, Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—Dr. W. S. Bristowe: "In Quest of Spiders".

Monday, December 18

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, South Kensington, London, S.W.7), at 8 p.m.—Mr. and Mrs. Harold Ingrams: "Hadhramaut in Time of War".

Tuesday, December 19

ROYAL ANTHROPOLOGICAL INSTITUTE (at 21 Bedford Square, London, W.C.1), at 1.30 p.m.—Dr. O. Samson: "The Place of China in an Ethnographical Museum".

ROYAL SOCIETY OF ARTS (DOMINIONS AND COLONIES SECTION) (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Dr. I. E. Coop and Mr. A. L. Poole: "Scientific Collaboration between the United Kingdom and New Zealand in War and Peace".

EUGENICS SOCIETY (at the Royal Society, Burlington House, Piccadilly, London, W.1), at 5 p.m.—Discussion on "Aspects of the Housing Problem" (to be opened by Mr. Alexander Block).

ROYAL INSTITUTION (at 21 Albemarle Street, Piccadilly, London, W.1), at 5.15 p.m.—Sir Henry Dale, O.M., G.B.E., Pres.R.S.: "Modern Developments in Chemical Therapeutics", (iii) "Penicillin and Antibiotics".

INSTITUTION OF ELECTRICAL ENGINEERS (RADIO SECTION) (at Savoy Place, Victoria Embankment, London, W.C.2), at 5.30 p.m.—Discussion on "The Television-Receiver Sound Channel" (to be opened by Mr. D. C. Espley).

Wednesday, December 20

ROYAL SOCIETY OF MEDICINE (at 1 Wimpole Street, London, W.1) at 2 p.m.—Discussion on "The Principles and Relationships Involved in Medical and Veterinary Education" (to be opened by Sir Henry Dale, G.B.E., O.M., P.R.S., Prof. J. B. Buxton and Prof. G. W. Pickering); at 4.30 p.m.—Dr. J. D. Rolleston: "The Folk-lore of Toothache" (C. E. Wallis Lecture).

INSTITUTION OF ELECTRICAL ENGINEERS (LONDON STUDENTS' SECTION) (at Savoy Place, Victoria Embankment, London, W.C.2), at 7 p.m.—Mr. J. F. Stirling: "The Condensation of Atmospheric Moisture on Insulation Surfaces".

Friday, December 22

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (in the Lecture Theatre of the Literary and Philosophical Society, Newcastle-upon-Tyne), at 6 p.m.—Dr. H. Orenstein: "Methods and Motion Study Applied to the Shipbuilding Industry".

APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

GRADUATE MASTER to teach GENERAL SCIENCE in the Junior School, mainly to Engineering and Building forms—The Clerk to the Governors, Mid-Essex Technical College and School of Art, Chelmsford (December 21).

SENIOR TECHNICIAN to take charge of Physics Workshop—The Secretary, Mount Vernon Hospital and the Radium Institute, Northwood, Middx. (December 22).

RESEARCH ASSISTANT with good constructional ability to assist in development of electro-optical apparatus—The Secretary, Mount Vernon Hospital and the Radium Institute, Northwood, Middx. (December 22).

PRINCIPAL OF THE SUNDERLAND TECHNICAL COLLEGE—The Director of Education, Education Offices, 15 John Street, Sunderland (endorsed "Technical College—Appointment of Principal") (December 23).

ANIMAL HUSBANDRY OFFICER—The Secretary, Norfolk War Agricultural Executive Committee, Sprowston, Norwich (December 23).

IRRIGATION ENGINEER by the Government of Trinidad—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (quoting Reference No. E.1245A.) (December 27).

ASSISTANT ENGINEER by the City Council of Gibraltar—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (quoting Reference No. E.1244A.) (December 27).

PHYSICAL RESEARCH METALLURGIST for mechanical and physical investigations (Reference No. F.3202.XA), a **RESEARCH METALLURGIST** for investigations of foundry methods (Reference No. F.3201.XA), and a **PHYSICAL CHEMIST** for the investigation of corrosion problems, etc. (Reference No. F.3203.XA), in the Research Department of a South Wales Company—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (December 27).

RESEARCH MANAGER-PHYSICIST with sufficient experience and theoretical knowledge of vacuum technique and associated equipment to take charge of development research for high-vacuum equipment by a small but progressive and established concern located in S.E. London—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (quoting Reference No. A.735.XA) (December 27).