University of California Publications in American Archaeology and Ethnology. Vol. 25, No. 2: Mentawei Religious Cult. By Edwin M. Loeb. Pp. 185-247+plates 69-78. 80 cents. Vol. 25, No. 3: Tribal Initiations and Secret Societies. By Edwin M. Loeb. Pp. 249-288. 50 cents. (Berkeley, Calif.: University of California Press; London: Cambridge University Press.)

Deutsche Seewarte. Aus dem Archiv der Deutschen Seewarte. Band 46, Nr. 3: Gezeitenuntersuchungen in der Deutschen Bucht der Nordsee. Nach Beobachtungen an Bord des Vermessungsschiffes Panther im Juni 1924. Im Auftrage der Deutschen Seewarte bearbeitet von Dr. H. Thorade. Pp. 85+4 Tafeln. (Hamburg.)

Department of Commerce: Bureau of Standards. Research Paper No. 45: Apparatus and Methods for the Separation, Identification and Determination of the Chemical Constituents of Petroleum. By Edward W. Washburn, Johannes H. Bruun and Mildred M. Hicks. Pp. 467-488+5 plates. 10 cents. Research Paper No. 46: Recombination Spectra of Ions and Electrons in Casium and Helium. By F. L. Mohler and C. Boeckner. Pp. 489-500. 5 cents. Research Paper No. 49: Discharge Coefficients of Square-edged Orifices for Measuring the Flow of Air. By H. S. Bean, E. Buckingham and P. S. Murphy. Pp. 561-668+2 plates. 20 cents. (Washington, D.C.: Government Printing Office.)

Proceedings of the United States National Museum. Vol. 74, Art. 13: Tsehermigite, Ammoniojarosite, Epsomite, Celestite and Paligorskite from Southern Utah. By Earl V. Shannon. (No. 2758.) Pp. 12. Vol. 74, Art. 15: The Fossil Crinoid Genus Vasocrinus Lyon. By Edwin Kirk. (No. 2766.) Pp. 10. Vol. 74, Art. 25: A New Salamander from Southern California. By Emmett Reid Dunn. (No. 2770.) Pp. 3. (Washington, D.C.: Government Printing Office.)

## Diary of Societies.

FRIDAY, APRIL 19.

Physical Society (at Imperial College of Science), at 5.—Presentation of the Guthrie Medal to Dr. C. E. Guillaume.—Prof. W. R. Bridgman: The Properties of the Elements under High Pressures (Guthrie Lecture). BRITISH INSTITUTE OF RADIOLOGY (Medical), at 5.—Informal Discussion on Bone-Diseases (especially Multiple Myeloma).
INSTITUTION OF MECHANICAL ENGINEERS, at 6.—W. Reavell: The Standard-

isation of Keys and Keyways.

INSTITUTION OF ELECTRICAL ENGINEERS (London Students' Section) (Annual General Meeting), at 6.15.—V. E. Connor: The Manufacturing and Testing of Submarine Cables.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7.—B. Chambers and F. W. Sharp: Carbon and Carbro.

SOCIETY OF DYERS AND COLOURISTS (Glasgow Section) (at 7 Gordon Street, Glasgow), at 7.15.—Annual General Meeting.

WEST BROMWICH ENGINEERING SOCIETY (at Kenrick Technical College, West Bromwich), at 7.30.—D. G. Mackintosh: The Erection of Steel Bridges.

Divides. Junior Institution of Engineers, at 7.30.—Lt.-Col. J. T. C. Moore-Brabazon: Early Aviation (Lecture).

Institute of British Foundamen (Sheffield Branch) (Annual Meeting) (at Albany Hotel, Sheffield), at 7.45.—Recent Developments in Cupola Control. Control.

CORTOL.

ROYAL SOCIETY OF MEDICINE (Electro-Therapeutics Section), at 8.80.—
Dr. S. G. Scott: Myeloma—Differential Diagnosis.—Dr. J. D. White:
Bone Lesions in Tropical Diseases.
ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. Owen T. Jones:
History of the Grand Canyon, Yellowstone National Park.
SOCIETY OF DYERS AND COLOURISTS (Manchester Section) (at Manchester).

Annual Gappend Maching.

-Annual General Meeting.

## SATURDAY, APRIL 20.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS (Southern District) (at Council House, Bristol), at 10.39 a.m.—H. F. Proctor: Description of the New Power Station, Portishead.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS (Newcastle-upon-Tyne), at 2.30.—C. H. Leeds: Boring against Workings likely to contain an Accumulation of Water or other Liquid Matter, and a Method of Negotiating a Fault.—C. N. Kemp: The X-Ray Analysis of Coal: the Radiographic Variables and their Control.—Papers open for discussion:—Roof Control on Longwall Faces, J. F. C. Friend; Diamond Boring Applied to Tapping Drowned Areas Underground, F. E. Smyth; Land Drainage, H. C. Pawson; The Laws of Motion of Particles in a Fluid, R. G. Lunnon.

MINING INSTITUTE OF SCOTLAND (at Royal Technical College, Glasgow).—Annual Meeting.

Annual Meeting.

MONDAY, APRIL 22.

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ROYAL GEOGRAPHICAL SOCIETY (at Lowther Lodge), at 4.—Miss E. R. G. TAylor: Roger Barlow: an Early XVIth Century Geographer. VICTORIA INSTITUTE, at 4.30.—Dr. A. T. Schofield: Humanity. INSTITUTION OF MECHANICAL ENGINEERS (Graduates' Section, London), at 6.30.—Informal Discussion on The Engineer as A Salesman. INSTITUTION OF AUTOMOBILE ENGINEERS (Graduates' Meeting) (at Loughborough College), at 7.—H. M. Smith: Steering Gears.

INSTITUTION OF AUTOMOBILE ENGINEERS (North of England Centre) (at Sheffleld University), at 7.—Dr. H. J. Gough: Recent Developments in the Study of the Fatigue of Metals.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Informal Meeting of Kinematograph Group), at 7.—H. A. Carter: The De Vry 16 mm. Synchronised Sound Motion Picture Apparatus, with Projection of Films and Synchronised Gramophone Records.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 8.—J. Begg: The Work of George Wittet.

ROYAL SOCIETY OF ARTS, at 8.—Sir E. Denison Ross: Nomadic Movements in Asia (Cantor Lectures) (11.).

ROYAL SOCIETY OF MEDICINE (Odontology Section), at 8.—G. Northcroft: The Migration of a Foreign Body.—S. Friel: The Relation of Function to the Size and Form of the Jaws.

ROYAL GROGRAPHICAL SOCIETY (at Polytechnic, Regent Street), at 8.30.—G. M. Dyott: The Search for Col. Fawcett (with Kinematograph Eliza).

### TUESDAY, APRIL 23.

ROYAL SOCIETY OF MEDICINE (Medicine Section), at 5.—Dr. O. Leyton: How can we decide whether a case of Glycosuria should be treated?—Dr. W. T. Munro: Pulmonary Tuberculosis due to Bovine Tubercle Bacilli.

Bacilli.

ZOOLOGICAL SOCIETY OF LONDON, at 5.30.—Secretary: (a) Report on the Additions to the Society's Menagerie during the month of March 1929; (b) Exhibition and Note on the Society's Scientific Publications.—S. G. M. Ramanujam: The Study of the Development of the Vertebral Column in Teleosts, as shown in the Life-history of the Herring.—Prof. E. B. Poulton: British Insectivorous Bats and their Prey.

Instruction of Civil Engineers, at 6.

London Natural History Society (at Winchester House, E.C.) (Bacot Memorial Meeting), at 6.30.—R. S. Bagnall: Plants and their Insect Associates.

Associates.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN, at 7 .- H. R. Ward: Some Continental Zoos.

Institution of Automobile Engineers (Wolverhampton Centre) (at Engineering and Scientific Club, Wolverhampton), at 7.30.—H. W. Pitt: Central Lubrication of Chassis Bearings.

#### WEDNESDAY, APRIL 24.

Eugenics Society (at Royal Society), at 5.15.—C. J. Bond: Hemilateral Asymmetry in Animals and Man, and its Relation to Cross-breeding (Lecture).

Newcomen Society for the Study of the History of Engineering and Technology (at Caxton Hall), at 5.80.—C. F. Dendy-Marshall: The Rainhill Locomotive Trials of 1829.

GEOLOGICAL SOCIETY OF LONDON, at 5.30.—R. Murray-Hughes: The Geology of Part of North-Western Rhodesia; with Petrographical Notes by A. A. Fitch.
ROYAL SOCIETY OF ARTS, at 8.—Lynton Fletcher: Recent Developments

in Educational Broadcasting.

## THURSDAY, APRIL 25.

LONDON MATHEMATICAL SOCIETY (at Royal Astronomical Society), at 5.—
S. D. Chowla: Some Formulæ Connected with Gauss's Sums.—Doris
M. Hirst: On Expansions which are Formally Reduced to Zero by the
Operator Sinh D—cD.—Prof. E. W. Hobson: On a Generalisation of
Watson's Expressions for Legendre's Functions.—Prof. R. L. Jeffery:
The Continuity of a Function Defined by a Definite Integral.
J. Tennant: Nasik or Pandiagonal Squares of the Order of any Odd
Prime

J. Tennant: Nasik of Pandiagonal equates of the Costs.

Prime.

Institute of Pathology and Research (St. Mary's Hospital, W.2), at 5.—Sir Almroth E. Wright: The Experimental Method in Medicine. Chemical Society of the Value of Mechanical Engineers, at 5.30.—Sir Harold Hartley: Theodore W. Richards Memorial Lecture.

Royal Society of Medicine (Urology Section), at 5.30.—Dr. P. J. Cammidge: Prostatectomy in Diabetics.

Institution of Electrical Engineers, at 6.—Dr. G. C. Simpson: Lightning (Kelvin Lecture).

Royal Aeronautical Society (at Royal Society of Arts), at 6.30.—

OYAL AERONAUTICAL SOCIETY (at Royal Society of Arts), at 6.30.—Squadron-Leader C. L. Scott: By Flying Boat to India.

## FRIDAY, APRIL 26.

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PHYSICAL SOCIETY (at Imperial College of Science), at 5.—T. Smith, Dr. G. F. C. Searle, Instructor-Capt. T. Y. Baker, Dr. J. W. French, W. E. Williams, C. G. Vernon, H. H. Emsley, C. W. Hansel, H. Tunley, L. Moore, Conrad Beck, V. T. Saunders, and Dr. C. V. Drysdale: Discussion on The Teaching of Geometrical Optics.

ROYAL SOCIETY OF MEDICINE (Disease in Children Section), at 5.

ROYAL INSTITUTION OF GERAT BRITAIN, at 7.—E. A. Salt: Platinotype. Instruction of Electrical Engineers (Scottish Centre) (at University College, Dundee), at 7.30.—W. Holmes: Load-levelling Relays and their Application in connexion with Future Metering Problems.

ROYAL SOCIETY OF MEDICINE (Epidemiology Section), at 8.—Dr. J. G.

Application in connexion with Future Metering Problems.

ROYAL SOCIETY OF MEDICINE (Epidemiology Section), at 8.—Dr. J. G.
Thomson: Endemic Malaria in Southern Rhodesia.

British Psychological Society (Industrial Section) (at National Institute of Industrial Psychology), at 8.—J. N. Langdon: Evidence of a Central Factor in Tests of Manual Dexterity.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. R. W. Chambers: English Civilisation from Alfred to Harold, 900-1066.

## PUBLIC LECTURES.

MONDAY, APRIL 22.

THE UNIVERSITY, GLASCOW, at 5.—Sir Norman Walker: Medical Education and Qualification in the United States.

#### TUESDAY, APRIL 23.

GRESHAM COLLEGE (Basinghall Street), at 6.—A. R. Hinks: Latitudes and Longitudes (Gresham Lectures). (Succeeding Lectures on April 24, 25, and 26.)
INSTITUTION OF MECHANICAL ENGINEERS, at 8.—C. E. Stromeyer: What

Health and Civilisation owe to Engineering (Chadwick Lecture).

# WEDNESDAY, APRIL 24.

University of Birmingham, at 4.80.—Dr. C. Singer: Epochs of Medical History. (Succeeding Lectures on May 1 and 8, June 19 and 26.)

Mansion House (arranged by British Science Guild), at 4.30.—Developments of British Chemical Manufactures. Lord Melchett in the chair.—Sir Frederick Keeble: Fertilisers from the Air.—A. B. Shearer: Rayon (Artificial Silk).—F. H. Carr: Synthetic Drugs.

#### FRIDAY, APRIL 26.

World Association for Adult Education (16 Russell Square, W.C.1), at 8.30.—Miss R. M. Fleming: Soil and Civilisation in Russia.