

human skulls, dating from prehistoric times to the present day, the author considers that asymmetry is the normal form of the human figure, and is not, as supposed by Lombroso, a sign of degeneration. A simple physiological reason is put forward as the cause of this asymmetry, which is regarded as the necessary result of the erect position of the human species.—The quantity of X-rays absorbed and transmitted by the successive layers of tissues: H. **Guilleminot**.—An attempt at grafting articular tissues: **Henri Judet**.

CALCUTTA.

Asiatic Society of Bengal, March 4.—Certain unpublished drawings of antiquities in Orissa and northern Circars: **Manmohan Chakravarti**. This paper invites attention to the eleven folios of drawings received by the society in December, 1822, and forming a part of the remarkable collection of Lieut.-Colonel Colin Mackenzie. It takes up two of the folios dealing with the antiquities of Orissa and northern Circars; the one of the smaller size (B) has eighty-five originals, while the other of the larger size has two originals and thirty-two duplicates, and gives a brief description of each in the Appendices A and B. They contain interesting drawings of Hindu sculptures, pillars, and other architectural designs, drawn in 1815.—The exact determination of the fastness of the more common indigenous dyes of Bengal, and comparison with typical synthetic dye-stuffs, part ii., dyeing on silk: **E. R. Watson**.—Oil of *Lawsonia alba*: **D. Hooper**.—A general theory of osculating conics: Prof. **Syamadas Mukhopadhyaya**.

DIARY OF SOCIETIES.

THURSDAY, MARCH 26.

ROYAL SOCIETY, at 4.30.—Bakerian Lecture: The Thermal and Electrical Conductivities of Metals and Alloys at Low Temperatures: Prof. C. H. Lees, F.R.S.—Note on the Values of the Board of Trade Standards of Current and Electromotive Force: T. Mather, F.R.S., and F. E. Smith.—Note on the Rise of Meteorological Balloons and the Temperature of the Upper Air: A. Mallock, F.R.S.
ROYAL SOCIETY OF ARTS, at 8.—The Navigation of the Air: Dr. H. S. Hele-Shaw, F.R.S.
ROYAL INSTITUTION, at 3.—Standardisation in Various Aspects: (2) Electrical Engineering: Dr. R. T. Glazebrook, F.R.S.
CHEMICAL SOCIETY, at 5.—Annual General Meeting.—Presidential Address: The Electron as an Element: Sir William Ramsay, K.C.B., F.R.S.

FRIDAY, MARCH 27.

ROYAL INSTITUTION, at 9.—Radio-active Change in the Earth: the Hon. R. J. Strutt, F.R.S.
PHYSICAL SOCIETY, at 5.—(1) Notes on the Plug Permeameter; (2) On the Use of Shunts and Transformers with Alternate Current Measuring Instruments; (3) On Wattmeters; (4) Experimental Demonstration of Alternate Current Wave Propagation in a Helix: Dr. C. V. Drysdale.
INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Combustion Processes in English Locomotive Fire-Boxes: Dr. F. J. Brislee.—Combustion Processes in American Locomotive Fire-Boxes: L. H. Fry.
ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—A Canoe Journey to the Plains of the Caribou: E. Thompson Seton.

SATURDAY, MARCH 28.

ROYAL INSTITUTION, at 3.—Electric Discharges through Gases: Prof. J. J. Thomson, F.R.S.

MONDAY, MARCH 30.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Geographical Conditions affecting the British Empire; (2) British Islands: H. J. Mackinder.
ROYAL SOCIETY OF ARTS, at 8.—Fuel and its Future: Prof. V. B. Lewes.
INSTITUTE OF ACTUARIES, at 5.—On Reversionary Bonuses as affected by Expenses and Variations in Rates of Mortality: H. H. Austin.

TUESDAY, MARCH 31.

ROYAL INSTITUTION, at 2.—The Egyptian Sudan: its History, Monuments, and Peoples, Past and Present: Dr. E. A. Wallis Budge.
INSTITUTION OF CIVIL ENGINEERS, at 8.—Some Methods of Heating adopted in Hospitals and Asylums recently built: E. R. Dolby.

WEDNESDAY, APRIL 1.

ROYAL SOCIETY OF ARTS, at 8.—Dr. Schlick's Gyroscopic Apparatus for Preventing Ships from Rolling: M. Wurl.
GEOLOGICAL SOCIETY, at 8.—The Geological Structure of the St. David's Area (Pembrokeshire): J. F. N. Green.
SOCIETY OF PUBLIC ANALYSTS, at 8.—Lead in Tartaric Acid, Cream of Tartar and Baking Powders: The President.—(1) The Nitrogen Factor for Casein; (2) The Recovery of Amyl Alcohol from Waste Gerber Liquors: H. D. Richmond.—Carapa Oil: Dr. J. Lewkowitsch.—A Rapid Method for the Estimation of Mercuric Salts in Aqueous Solution: S. G. Liversidge.
ENTOMOLOGICAL SOCIETY, at 8.

THURSDAY, APRIL 2.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: Complete Survey of the Cell Lamination of the Cerebral Cortex of the Lemur: Dr. F. W. Mott, F.R.S., and Miss A. M. Kelley.—The Alcoholic Ferment of Yeast Juice. Part III. The Function of Phosphates in the Fermentation of Glucose

by Yeast Juice: A. Harden and W. J. Young.—The Antagonistic Action of Calcium upon the Inhibitory Effect of Magnesium: S. J. Metzler and J. Auer.—Studies on Enzyme Action, XI. The Hydrolysis of Raffinose: Prof. H. E. Armstrong, F.R.S., and W. H. Glover.—Studies on Enzyme Action, XII. Emulsin: Prof. H. E. Armstrong, F.R.S., Dr. E. F. Armstrong, and E. Horton.—On Some Features in the Hereditary Transmission of the Albino Character and the Black Piebald Coat in Rats, Paper II.: G. P. Mudge.

ROYAL INSTITUTION, at 3.—The Animals of Africa: R. Lydekker, F.R.S.
ROYAL SOCIETY OF ARTS, at 8.—The Navigation of the Air: Prof. H. S. Hele Shaw, F.R.S.

LINNEAN SOCIETY, at 8.—Altitude and Distribution of Plants in Southern Mexico: Dr. Hans Gadov, F.R.S.—The Anatomy of some Sapoteaceous Seedlings: Miss Winifred Smith.—Notes on some Sponges recently collected in Scotland: Dr. N. Annandale.

CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—Efficiency of Boiler Heating Surface: C. Humphrey Wingfield.

CHEMICAL SOCIETY, at 8.30.—The Condensation of Epichlorohydrin with Phenols: D. R. Boyd and E. R. Marle.—Rate of Hydrolysis of Chloroacetates and Bromoacetates, and of α -Chlorohydrin by Water and by Alkali, and the Influence of Neutral Salts on the Reaction Velocities. Preliminary Note: G. Senter.—A New General Method of Preparing Diazonium Bromides: F. D. Chattaway.—On the Probable Nature of the Impurity found in the Triphenylmethane Spectrum: W. N. Hartley.—The Absorption Spectrum of Triphenylmethane: A. G. G. Leonard.—The Constituents of Cyprus Origanum Oil. Isolation of a New Terpene (Origanene): S. S. Pickles.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—High Speed Electrical Machinery: G. Stoney and A. H. Law.

FRIDAY, APRIL 3.

ROYAL INSTITUTION, at 9.—The Modern Motor Car: Lord Montagu of Beaulieu.

INSTITUTION OF CIVIL ENGINEERS, at 8.—Notes on the Foundations of an Indian Bridge: G. W. N. Rose.

SATURDAY, APRIL 4.

ROYAL INSTITUTION, at 3.—Electric Discharges through Gases: Prof. J. J. Thomson, F.R.S.

CONTENTS.

| | PAGE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Misleading Seismology | 481 |
| German School Botany | 481 |
| Elementary Physics | 482 |
| Our Book Shelf:— | |
| Bell: "The Mechanism of Speech."—Prof. John G. McKendrick, F.R.S. | 483 |
| South: "The Moths of the British Isles."—W. F. K. Kienitz-Gerloff: "Physiologie und Anatomie des Menschen mit ausblicken auf den ganzen Kreis der Wirbeltiere."—W. W. | 484 |
| Stephenson: "The Elements of Geography" | 484 |
| Hemmelmayr and Brunner: "Lehrbuch der Chemie und Mineralogie für die vierte Klasse der Real-schulen" | 484 |
| Letters to the Editor:— | |
| The Cotton Plant.—W. Lawrence Balls; Lieut.-Colonel D. Prain, C.I.E., F.R.S. | 484 |
| The Isothermal Layer of the Atmosphere.—C. E. Stromeyer; W. H. Dines, F.R.S. | 485 |
| The Penetrating Radiation.—Prof. A. S. Eve | 486 |
| Mosaic Origin of the Atomic Theory.—Dr. John Knott | 486 |
| Tabulated Values of Certain Integrals.—Harry M. Elder | 486 |
| Notes on Ancient British Monuments. VII.—The Aberdeen Circles (Continued). (Illustrated.) By Sir Norman Lockyer, K.C.B., F.R.S. | 487 |
| Proposed Alteration in the Calendar. By W. T. L. | 489 |
| Peculiarities in the Structure of some Heavenly Bodies | 490 |
| Sir John Eliot, K.C.I.E., F.R.S. By A. P. | 490 |
| Notes | 492 |
| Our Astronomical Column:— | |
| Water Vapour in the Martian Atmosphere | 497 |
| The Dispersion of Light in Interstellar Space | 497 |
| The Moving Object near Jupiter | 497 |
| Distribution of Standard Time in Egypt | 497 |
| Observations of Algol Variables | 497 |
| Nebulae and Nebulosity observed by Prof. Barnard | 497 |
| Russian Scientific Publications | 498 |
| The Corals of Hawaii. By Prof. S. J. Hickson, F.R.S. | 499 |
| Commemorative Dinner to Sir William Ramsay, K.C.B., F.R.S. | 500 |
| New Slide-rules | 500 |
| University and Educational Intelligence | 501 |
| Societies and Academies | 501 |
| Diary of Societies | 504 |