

countenance to the Weissman school, which denies the transmission of functionally acquired characters, but that, on the contrary, they furnish the strongest refutation of the views urged by Weissman and his followers. The little moths of which I have been speaking, and indeed the great majority of insects—all, in fact, except the truly social species—perform their humble parts in the economy of nature without teaching or example, for they are, for the most part, born orphans, and without relatives having experience to communicate. The progeny of each year begins its independent cycle anew. Yet every individual performs more or less perfectly its allotted part, as did its ancestors for generation after generation. The correct view of the matter, and one which completely refutes the more common idea of the fixity of instinct, is that a certain number of individuals are, in point of fact, constantly departing from the lines of action and variation most useful to the species, and that these are the individuals which fail to perpetuate their kind and become eliminated through the general law of natural selection.

"Whether these actions be purely unconscious and automatic or more or less intelligent and conscious, does not alter the fact that they are necessarily inherited. The habits and qualities that have been acquired by the individuals of each generation could have become fixed in no other way than through heredity. Many of these acts, which older naturalists explained by that evasive word "instinctive," may be the mere unconscious outcome of organization, comparable to vegetative growth; but insects exhibit all degrees of intelligence in their habits and actions, and they perform acts which, however voluntary and, as I believe, conscious in many cases, as in that of our Yucca Moth, could not be performed were the tendency not inherited. Every larvæ which spins or constructs a hibernaculum, or a cocoon in which to undergo its transformations, exemplifies the potent power of heredity in transmitting acquired peculiarities. A hundred species of parasitic larvæ, e.g., of the family Braconidae, which in themselves are almost or quite indistinguishable from one another structurally, will nevertheless construct a hundred distinctive cocoons—differing in form, in texture, in colour and in marking—each characteristic of its own species, and in many instances showing remarkable architectural peculiarities. These are purely mechanical structures, and can have little or nothing to do with the mere organization or form or structure of the larva, but they illustrate in the most convincing manner the fact that the tendency to construct, and the power to construct, the cocoon after some definite plan, must be fixed by heredity, since there is no other way of accounting for it. This fact alone, which no one seems to have thought of in the discussion, should be sufficient to confound the advocates of the non-transmissibility of acquired characteristics.

"Thus, to my view, modification has gone on in the past, as it is going on at the present time, primarily through heredity in the insect world. I recognize the physical influence of environment; I recognize the effect of the interrelation of organisms; I recognize, even to a degree that few others do, the psychic influence, especially in higher organisms—the power of mind, will, effort, or the action of the individual as contradistinguished from the action of the environment; I recognize the influence of natural selection, properly limited; but above all, as making effective and as fixing and accumulating the various modifications due to these or whatever other influences, I recognize the power of heredity, without which only the fact of the influences mentioned can be permanently operative."

FORTHCOMING SCIENTIFIC BOOKS.

AMONG Messrs. MACMILLAN AND CO'S announcements are the following books:—"Evolution and Man's Place in Nature," by Prof. H. Calderwood; "A Primer of Practical Horticulture," by J. Wright; "A Text-book of Tropical Agriculture," by H. A. Nicholls, M.D., F.L.S., C.M.Z.S., with illustrations; "The Food of Plants," by A. P. Laurie; "Metal Colouring and Bronzing," by Arthur H. Hiorns; "Differential Calculus for Schools," by Joseph Edwards; "The Beauties of Nature: and the Wonders of the World we live in," by the Right Hon. Sir John Lubbock, Bart., M.P., F.R.S., with illustrations; "Finger Prints," by Francis Galton, F.R.S., with numerous illustrations; "Hereditary Genius: an Inquiry into its Laws and Consequences," by Francis Galton, F.R.S., new edition; "Materials for the Study of Variation in Animals," Part I., discontinuous variation, by William Bateson, illustrated; "On

Colour Blindness," by Thomas H. Bickerton, illustrated (NATURE series); Hygiene: its Principles as applied to Public Health, adapted to the requirements of the Elementary and Advanced Stages of the Science and Art Department, &c.," by Edward F. Willoughby, M.B., new and enlarged edition; "A Uniform Edition of Prof. Huxley's Essays, Uniform with the works of Emerson, John Morley, &c., in 6 vols., comprising Lay Sermons, Addresses and Reviews, Critiques and Addresses, Science and Culture, American Addresses, Man's Place in Nature," &c.; "Atlas of Classical Antiquities," by Th. Schreiber, edited for English use by Prof. W. C. F. Anderson; "Researches on the Propagation of Electrical Force," by Prof. Henrich Hertz, authorized translation by Prof. D. E. Jones, B.Sc., illustrated; "A Text-book of Pathology: Systematic and Practical," by Prof. D. J. Hamilton; "Electrical Papers," by Oliver Heaviside; "Pioneers of Science," by Prof. Oliver Lodge, with portraits and other illustrations; "The Diseases of Modern Life," by B. W. Richardson, M.D., new and cheaper edition; "The Theory and Practice of Absolute Measurements in Electricity and Magnetism," by Prof. A. Gray, Vol. II., and "A Theory of Wages and its Application to the Eight Hours Question and the Labour Problems," by Herbert M. Thompson.

Mr. MURRAY announces:—"Explosives and Their Powers," translated and condensed from the French of M. Berthelot, by C. Napier Hake and William MacNab, with an introduction by Lt.-Colonel J. P. Cundill, R.A., H.M. Inspector of Explosives, with illustrations; "Charles Darwin," a Biography, founded on the "Life and Letters of Charles Darwin," by his son, Francis Darwin, F.R.S., with portrait and illustrations; "The Collected Works of Werner Von Siemens," translated by E. F. Bamber, vol. ii. "Applied Science," with illustrations; "Notes by a Naturalist on H.M.S. Challenger," a record of observations made during the voyage of H.M.S. Challenger round the world in the years 1872-76, under the command of Captain Sir G. S. Nares, R.N., K.C.B., F.R.S., and Captain F. T. Thomson, R.N., by H. N. Moseley, F.R.S., a new and cheaper edition, with portrait and numerous woodcuts; "Records of a Naturalist on the Amazons during Eleven Years' Adventure and Travel," by Henry Walter Bates, a new edition of the unabridged work, with a memoir of the author by Edward Clodd, with portrait, illustrations, and map; "The English Flower Garden: Design, Views, and Plants," by W. Robinson, third edition, entirely revised, with many fine additional engravings; "A Manual of Naval Architecture," for the use of officers of the Navy, the Mercantile Marine, ship-owners, ship-builders, and yachtmen, by W. H. White, C.B., F.R.S., third edition, thoroughly revised and in great part rewritten, with 150 illustrations; "Outlines of Ancient Egyptian History," based on the work of Auguste Mariette, translated and edited, with notes, by Mary Brodrick, a new and revised edition; "The Metallurgy of Iron and Steel," by the late John Percy, M.D., F.R.S., a new and revised edition, with the author's latest corrections, and brought down to the present time, by H. Bauerman, F.G.S., with illustrations; "Studies in Modern Geology," by Dr. R. D. Roberts; "The Physiology of the Senses," by Professor McKendrick and Dr. Snodgrass, with illustrations; "Outlines of Modern Botany," by Prof. Patrick Geddes; "Logic, Inductive and Deductive," by Prof. Minto; "Psychology: A Historical Sketch," by Prof. Seth; "An Introduction to Physical Science," by John Cox; and "The History of Astronomy," by Arthur Berry.

Among the books in active preparation at the CLARENDON PRESS may be mentioned:—"The Logic of Hegel," translated by W. Wallace, new edition; "Mathematical Papers of the late Henry J. S. Smith, Savilian Professor of Geometry in the University of Oxford," with portrait and memoir, 2 vols. quarto; "Researches in Stellar Parallax by the Aid of Photography" (Astronomical Observations made at the University Observatory, Oxford, fasc. iv.), by C. Pritchard, D.D., F.R.S.; a supplementary volume to Prof. Clerk Maxwell's "Treatise on Electricity and Magnetism," by J. J. Thomson; "A Manual of Crystallography," by M. H. N. Story-Maskelyne; "Elementary Mechanics," by A. L. Selby; "Analytical Geometry," by W. J. Johnston; "A Treatise on the Kinetic Theory of Gases," by H. W. Watson, D.Sc., new edition; "Hydrostatics and Elementary Hydrokinetics," by G. M. Minchin; "A Text-book of Pure Geometry," by J. W. Russell; "Catalogue of Eastern and Australian *Lepidoptera Heterocera* in the Collection of the Oxford University Museum," by Colonel C. Swinhoe;

and "Epidemic Influenza: a Study in Comparative Statistics," by F. A. Dixey, D.M.

The CAMBRIDGE UNIVERSITY PRESS promises:—"The Collected Mathematical Papers of Prof. Arthur Cayley, Sc.D., F.R.S.," vol. v.; "A History of the Theory of Elasticity and of the Strength of Materials," by the late I. Todhunter, Sc.D., F.R.S., edited and completed by Prof. Karl Pearson, vol. ii.; *Saint Venant to Lord Kelvin* (Sir William Thomson); "A Treatise on Analytical Statics," by E. J. Routh, Sc.D., F.R.S., vol. ii.; "A Treatise on the Theory of Functions of a Complex Variable," by A. R. Forsyth, Sc.D., F.R.S.; "The Jurassic Rocks of Cambridge," being the Sedgwick prize essay for the year 1886, by the late T. Roberts, M.A.; "Fossil Plants as Tests of Climate," being the Sedgwick prize essay for 1892, by A. C. Seward, M.A.; "An Elementary Treatise on Plane Trigonometry," by E. W. Hobson, Sc.D., and C. M. Jessop; "Euclid's Elements of Geometry, Books v. and vi.," by H. M. Taylor; "Mechanics and Hydrostatics for Beginners" (this book will include those portions of these subjects which are required for the Matriculation Examination of the University of London, by S. L. Loney); and "Solutions to the Exercises in Euclid, Books i.-iv.," by W. W. Taylor.

Messrs. WHITTAKER AND CO. announce:—Prof. Oliver Lodge's "Treatise on Lightning Conductors and Lightning Guards;" "A Comprehensive Work on the Dynamo," by C. C. Hawkins and F. Wallis; "Coal Pits and Pitmen," by R. Nelson Boyd, M.Inst. C.E.; "Pattern-Making for Students in Technical Schools and Apprentices," by a Foreman Pattern Maker; "Fitting for Engineer Students and others," by the same author; "Electrical Experiments," by G. E. Bonney; "Practical Electric-Light Fitting," by F. C. Allsop; "Electric-Lighting and Power-Distribution," by W. Perren Maycock, M.I.E.E.; "How to Manage a Dynamo," by S. R. Bottone; "The Manufacture of Soap," by W. Lawrence Gadd, F.I.C., F.C.S.; "Ship's Carpentry," by M. and A. Mowat; "Hammered Metal Work," by C. G. Leland, author of "Wood-Carving" and "Leather-Work." In the Library of Popular Science—"Electricity and Magnetism," by S. R. Bottone; "Chemistry," by T. Bolas, F.I.C., F.C.S.; "Geology," by A. J. Jukes Browne, F.G.S.; and other Volumes. An Important Work for Medical Students—"Dissections Illustrated," a Graphic Handbook for Students of Human Anatomy, by C. Gordon Brodie, F.R.C.S., with Plates, carefully drawn and put on the stone by Percy Highley, from dissections of the human body made by the Senior Demonstrator of Anatomy at the Middlesex Hospital Medical School, the first part of which, with 17 coloured plates of the upper limb, two-thirds natural size, will be issued immediately.

In Mr. STANFORD'S list attention is drawn to:—A translation into English by Dr. Hatch of Dr. Theodor Posewitz's work on "Borneo: its Geology and Mineral Resources" (the translator has added a number of references and notes, and four new maps accompany the translation); a new book by Mr. Edward North Buxton, being an account of his adventures in pursuit of large game in various parts of the world (it will be entitled "Short Stalks: or Hunting Camps, North, East, South, and West," and will be accompanied by a number of original illustrations); the paper on "The Fayûm and Lake Moeris," which Major R. Hanbury Brown communicated to the recent Oriental Congress, with photographs by the author, diagrams, and a new map; "Castorologia: or the Traditions of a Canadian Beaver," by Mr. Horace T. Martin, of Montreal (the work will be a handsome octavo, with a number of maps and illustrations); "The Partition of Africa," by Mr. J. Scott Keltie, Secretary to the Royal Geographical Society (it will be brought well up to date, and supplied with an excellent apparatus of maps); and new Editions of the following: "Tanganyika: Eleven Years in Central Africa," by Captain Hore; the late Sir Andrew Ramsay's "Physical Geology and Geography of Great Britain," revised by Mr. W. Topley, F.G.S.; Prof. James Geikie's "Great Ice Age," thoroughly revised; and the late Sir Charles Anderson's "Lincoln Guide," revised by the Rev. A. R. Maddison, Librarian and Successor of Lincoln Cathedral.

Messrs. BAILLIÈRE, TINDALL AND COX have in the press:—"A Manual of Practical Medical Electricity," by Dawson Turner, M.D., F.R.C.P. Ed., M.R.C.P. Lond.; "The Practical Guide to the Public Health Acts and Correlated Acts for Officers of Health and Inspectors of Nuisances," by Thos. Whiteside Hime, M.B., second edition, enlarged; "Modern Thera-

peutics, Medical and Surgical, including the Diseases of Women and Children," by Geo. H. Napheys, M.D., ninth edition, revised and enlarged by Drs. Allen Smith and Aubrey Davis, vol. i., Medical; "Diseases of the Throat and Nose," a Practical Guide to Diagnosis and Treatment, with 220 typical illustrations in chromo-lithography and numerous wood engravings, by Lennox Browne, F.R.C.S. Edin., fourth edition.

Messrs. WILLIAMS AND NORSGATE will publish:—"Against Dogma and Free Will," by H. Croft Hiller, in which the author wishes to prove from the discoveries of Weismann the impossibility of Free Will, the certainty of Science, and the uselessness of Metaphysics; and in two volumes "The Supernatural: its Origin, Nature, and Evolution," by John H. King, in which the author treats first of the origin and nature of Supernatural Concepts, and then of the evolution of the Supernatural in various nations and its modern presentations.

MESSRS. GURNEY AND JACKSON have ready for immediate publication:—"Odorographia," a Natural History of Raw Materials and Drugs used in the Perfume Industry, by I. Ch. Sawyer, F.L.S.; "The Birds of Lancashire," by F. S. Mitchell, second edition, revised and annotated by Howard Saunders, F.L.S., etc., with additions by R. J. Howard, and other local authorities; a fourth edition of "Destructive Distillation," by Dr. Mills, F.R.S., and a book on "Wild Spain," by Abel Chapman and Walter J. Buck, treating of the beasts and birds of the Peninsula, deer, ibex, chamois, wild boar, and lynx, and bustards, flamingoes, eagles, vultures, game, and wild fowl, with more than 150 illustrations.

MESSRS. SAMPSON LOW AND CO., LIMITED, have in hand:—"The Student's Chemistry," by R. L. Taylor, F.I.C., F.C.S., fully illustrated; and "The Glacial Nightmare," by Sir Henry H. Howorth, M.P., 2 vols.

MESSRS. CASSELL AND CO., LIMITED, announce "The Dawn of Astronomy, by J. Norman Lockyer, F.R.S.; "Beetles, Butterflies, Moths, and other Insects," a brief introduction to their collection and preservation, by A. W. Kappel, F.L.S., F.E.S., and W. Egmont Kirby, with 12 coloured plates; "Cassell's Storehouse of General Information," Vol. III., fully illustrated with high-class wood engravings, and with maps and coloured plates; "The Year-Book of Science" (second year of issue), edited by Prof. Bonney, F.R.S., and containing contributions by leading scientific writers; Popular editions of Figuier's works revised by eminent British authorities, "The Insect World," "Reptiles and Birds" (new volumes); and "The Year-Book of Treatment for 1893," a critical review for practitioners of medicine and surgery.

MESSRS. CHAS. GRIFFIN AND CO., LIMITED, will issue "Diseases of the Heart (Diagnosis of)," by A. Ernest Sansom, M.D., F.R.C.P., with 13 plates and illustrations in the text; "Ruptures, a Treatise on," by J. F. C. Macready, F.R.C.S., with numerous plates engraved on the stone after photographs; "Clinical Diagnosis: the Chemical, Microscopical, and Bacteriological Evidence of Disease," by Prof. von Jaksch, of Prague, translated from the third German edition by Jas. Cagney, M.D., with additional illustrations, many in colours, second edition; "The Diseases of Children: Medical and Surgical," by H. Bryan Donkin, M.B., F.R.C.P., and Bilton Pollard, M.D., F.R.C.S.; "Gynæcology," a practical treatise on, by J. Halliday Croom, M.D., with the collaboration of MM. Milne Murray, M.B., and Johnson Symington, M.D.; "Midwifery," a practical treatise on, by John Phillips, M.D.; "A Manual of Obstetrics," for the use of students, nurses, and midwives, by Arch. Donald, M.D.; "Forensic Medicine and Toxicology" (a text-book of), by J. Dixon Mann, M.D., F.R.C.P.; "A Medical Handbook for the Use of Students," by R. S. Aitchison, M.B., F.R.C.P. Edin.; "Inorganic Chemistry" (a Text-Book of), by Dr. Dupré, F.R.S., and Dr. Wilson Hake, second edition, revised; "Mind in Matter," by the Rev. James Tait, third edition, revised and enlarged, with special reference to later Darwinism; "Biology" (a Text-Book of), by Prof. J. R. Ainsworth Davis, new edition, revised and enlarged, in two parts: (1) Vegetable Morphology and Physiology, (2) Animal Morphology and Physiology, with additional illustrations; "Coal Mining" (a Text-Book of), by H. W. Hughes, F.G.S., with frontispiece and 490 illustrations, reduced from working drawings; "Ore and Stone Mining," by Prof. C. Le Neve Foster, D.Sc., with numerous illustrations; "Dyeing" (a manual of), for the use of practical dyers, manufacturers, and students, by Dr. Knecht, Chr. Rawson, and Dr. R. Loewenthal, with numerous illustrations and specimens of dyed fabrics;

"Oils, Fats, Waxes, and Allied Materials, and the Manufacture therefrom of Candles, Soaps, and other Products," by C. R. Alder Wright, D.Sc., F.R.S., with numerous illustrations; "Painters' Colours, Oils, and Varnishes" (a practical Manual), by Geo. H. Hurst, with illustrations; "Applied Mechanics" (an Elementary Manual of), for first year students, by Prof. A. Jamieson, F.R.S.E., with very numerous illustrations; and "Griffin's Electrical Price-Book," for the use of electrical, civil, marine, and borough engineers, local authorities, architects, railway contractors, &c., edited by H. J. Dowling.

MESSRS. SWAN SONNENSCHNEIN AND Co.'s list contains:—"Text Book of Embryology: Man and Mammals," by Dr. Oscar Hertwig, translated and edited from the third German edition by Dr. E. L. Mark, fully illustrated; "Text-Book of Embryology: Invertebrates," by Drs. Korschelt and Heider, translated and edited by Dr. E. L. Mark and Dr. W. M. Woodworth, fully illustrated; "Text-Book of Comparative Geology," adapted from the work of Dr. Kayser, by Philip Lake, fully illustrated; "Text-Book of Palæontology for Zoological Students," by Theodore T. Groom, fully illustrated; "Text-Book of Petrology," by F. H. Hatch, D.Sc., a revised and enlarged edition of "An Introduction to the Study of Petrology," with 86 illustrations; "Handbook of Systematic Botany," by Dr. E. Warming, translated and edited by M. C. Potter, fully illustrated; "Practical Bacteriology," by Dr. Migula, translated and edited by H. J. Campbell, M.D.; "The Geographical Distribution of Disease in England and Wales," by Alfred Haviland, M.D., with several coloured maps; "A Treatise on Public Hygiene and its applications in different European Countries," by Dr. Albert Palmberg, translated, and the English portion edited and revised, by Arthur Newsholme, M.D., fully illustrated; "The Photographer's Pocket-Book," by Dr. E. Vogel, translated by E. C. Conrad, illustrated; "The Recrudescence of Leprosy and the Report of the Leprosy Commission," by William Tebb; "Roaring in Horses: its Pathology and Treatment," by P. J. Cadot, translated by Thomas J. Watt Dollar, M.R.C.V.S.; "Introductory Science Text-Books": additions—Introductions to the Study of "Zoology," by B. Lindsay, illustrated; "The Amphioxus," by Dr. B. Hatschek and James Tuckey, illustrated; "Geology," by Edward B. Aveling, D.Sc. (Lond.), illustrated; "Physiological Psychology," by Dr. Th. Ziehen, adapted by Dr. Otto Beyer and C. C. Vanliew, with 21 illustrations; "Biology," by H. J. Campbell, M.D.; "Young Collector Series": additions—"Flowering Plants," by James Britten, F.L.S.; "Grasses," by W. Hutchinson; "Fishes," by the Rev. H. C. Macpherson; and "Mammalia," by the Rev. H. C. Macpherson.

THE SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE has nearly ready for publication:—"Star Atlas," gives all the stars from 1 to 6.5 magnitude between the North Pole and 34° south declination and all nebulae and star clusters which are visible in telescopes of moderate powers, translated and adapted from the German of Dr. Klein, by the Rev. E. McClure, M.A., new edition brought up to date, with eighteen charts and eighty pages illustrative letterpress. "Vegetable Wasps and Plant Worms," by M. C. Cooke, L.L.D., illustrated. "Our Secret Friends and Foes," by Prof. Frankland, F.R.S.

MESSRS. LONGMANS AND Co. are preparing for publication:—"The Ruined Cities of Mashonaland: being a Record of Excavations and Explorations, 1891-92," by J. Theodore Bent, F.R.G.S., with numerous illustrations of Mashonaland, and of the author's interesting discoveries of the remains of a pre-historic people at the Zimbabwe ruins. An English translation of Wüllner's "Lehrbuch der Electricität," in 2 vols., translated and edited by G. W. de Tunzelmann, B.Sc., with 310 illustrations. The English editor has added much new matter, and by some changes of arrangement and mode of presenting the subject has endeavoured to make it a truthful representation of the present state of electrical science. "Chemical Lecture Experiments," by G. S. Newth.

MESSRS. LAWRENCE AND BULLEN will publish:—"Matriculation Chemistry," by Temple Orme.

MESSRS. J. AND A. CHURCHILL promise "Physiology" (Student's Guide Series), by E. H. Starling, M.D. Lond., with 100 illustrations; "A Guide to the Science of Photo-micrography," by Edward C. Bousfield, second edition, with 34 woodcuts and frontispiece; "Chemical Technology: or, Chemistry in its application to Arts and Manufactures," with which is incorporated "Richardson and Watts' Chemical Technology," edited by Charles Edward Groves, F.R.S., and William Thorp,

B.Sc.: vol. ii. Lighting—Sections: Stearine, by Mr. John McArthur; Candles, by Mr. Field; Oils, Oil Fields, Lamps, by Boverton Redwood; Gas, by Chas. Hunt; Electric Lighting, by Prof. Garnett; "Commercial Organic Analysis," by Alfred H. Allen, F.I.C., F.C.S. A treatise on the properties, proximate analytical examination, and modes of assaying the various organic chemicals and products employed in the arts, manufactures, medicine, &c., with concise methods for the detection and determination of their impurities, adulterations, and products of decomposition. Vol. iii., Part 2, Organic bases, cyanogen compounds, albuminoids, &c. "Wilson's Anatomy," edited by Prof. Henry E. Clark, eleventh edition, with 26 coloured plates, and 492 woodcuts; "Morris's Anatomy," a treatise by various authors: J. B. Sutton, H. Morris, J. N. Davies-Colley, W. J. Walsham, H. St. John Brooks, R. M. Gunn, A. Hensman, F. Treves, W. Anderson, and W. H. A. Jacobson, with more than 500 illustrations, many being coloured; "Ambulance Lectures," to which is added a Nursing Lecture, in accordance with the regulations of the St. John Ambulance Association, by John M. H. Martin, M.D., third edition, with 60 engravings, 142 pp.; and an English edition of Tommasi-Crudeli's well-known work on the Climate of Rome.

Mr. LEWIS'S announcements are:—"Various Forms of Hysterical or Functional Paralysis," by H. C. Charlton Bastian, M.D., F.R.S.; "Diseases of the Skin: Their Description, Pathology, Diagnosis and Treatment," by H. Radcliffe Crocker, M.D., F.R.C.P., second edition, with numerous illustrations; "A Text-book of Ophthalmology," by Dr. Ernest Fuchs, translated from the German by A. Duane, M.D., in one large octavo volume, with 178 illustrations; "Public Health Laboratory Work," by H. R. Kenwood, M.B., with illustrations; "Hygiene and Public Health," by Lucius C. Parkes, M.D., third edition, with numerous illustrations; "A Handbook of the Diseases of the Eye and their Treatment," by Henry R. Swanzy, M.B., F.R.C.S.I., fourth edition, illustrated with wood engravings, colour tests, etc.; "A Pharmacopoeia for Diseases of the Skin," edited by James Startin, third edition; and "The Sanitary Inspector's Handbook and Text-book for Students preparing for the Examinations of the Sanitary Institute, London," by Albert Taylor, with illustrations.

MESSRS. G. PHILIP AND SON have in the press:—"British New Guinea," a compendium of all the most recent information respecting our Papuan Possession, by J. P. Thomson, with valuable scientific appendix dealing with the Geology, Fauna, Flora, &c., illustrated with numerous engravings and photographs, and a coloured map; "Christopher Columbus," by Clements R. Markham, C.B., forming vol. vii. of the World's Great Explorers and Explorations, with 25 illustrations and numerous coloured maps; "The Development of Africa," a Study in Applied Geography, by Arthur Silva White, illustrated with a set of 14 coloured maps, specially designed by E. G. Ravenstein, F.R.G.S., second edition, revised to April 1892; "Atlas of Astronomy," a Series of Seventy-two beautifully executed Plates, with Explanatory Notes, by Sir Robert Stawell Ball, F.R.S.; "Astronomy for Every-Day Readers," and a Popular Manual of Elementary Astronomy, by B. J. Hopkins, with numerous illustrations.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, Sept. 12.—M. Duchartre in the chair.—On the heat of combustion of glycolic acid, by M. Berthelot.—Note on several new facts relating to the physiology of epilepsy, by M. Brown-Sequard. If by epilepsy is understood a group of reflex convulsive movements, it is invariably induced in guinea-pigs by cutting one of the sciatic nerves. If, however, the section has been made in the lower part of the thigh, the convulsive manifestations often are confined to the side of the lesion, and the animal retains consciousness. This is due to the regeneration of the nerve, which takes place rapidly, and which stops the development of the disease, or even cures it altogether. Generally, the greater the number of nerve fibres severed, the stronger is the tendency towards epileptic fits. A set of absolutely decisive facts have shown that a violent attack can be produced which is due to the spinal marrow alone. This epilepsy as displayed in guinea-pigs is absolutely equivalent to the idiopathic or cerebral disease in man. Clinical as