In the second place, Museums and Laboratories of Economic Botany. Much good work in this direction has been done in this country by the National Museum and by the department in charge of the investigation of new plants. We need institutions like those at Kew in England, and at Buitenzorg in Java, which keep in close touch with all the world. The founding of an establishment on a scale of magnitude commensurate with the greatness and needs of our country is an undertaking which waits for some one of our wealthy men.

In the third place, Experiment Stations. These may, within the proper limits of their sphere of action, extend the study of plants beyond the established varieties to the species, and beyond the species to equivalent species in other genera. It is a matter of regret that so much of the energy displayed in these stations in this country, and we may say abroad, has not been more economically directed.

Great economy of energy must result from the recent change by which co-ordination of action is assured. The influence which the stations must exert on the welfare of our country and the development of its resources is incalculable.

In the last place, but by no means least, the co-operation of all who are interested in scientific matters, through their observation of isolated and associated phenomena connected with plants of supposed utility, and by the cultivation of such plants by private individuals, unconnected with any State, Governmental, or academic institutions.

By these agencies, wisely directed and energetically employed, the domains of commercial and industrial botany will be enlarged. To some of the possible results in these domains, I have endeavoured to call your attention.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

PROF. BONNEY will begin a course of about sixty lectures on geology at University College, London, on Tuesday, October 6, at noon, and a course of about eighteen lectures on geology for engineering students, on Monday, October 12, at 2 p.m. A class for students preparing for the B.Sc. degree in the University of London will meet on October 6 at 2 p.m.

THE prizes to the students at the medical school of St. Thomas's Hospital will be distributed to-day by Sir G. M. Humphry, F.R.S.

LECTURES will be delivered in Gresham College, Basinghall Street, E.C., on October 6, 7, 8, and 9, by Dr. E. Symes Thompson, Gresham Professor of Medicine, on influenza and its results.

SEVERAL series of lectures for which the Salop County Council has made arrangements have been begun. They are on chemistry, botany, geology, agricultural chemistry, management of stock, insect pests and crop diseases, mechanics, and principles of agriculture, and are being given in various parts of the county. Most of them are being delivered in connection with the Oxford University Extension Scheme.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, September 21.—M. Duchartre in the chair.—Admiral Mouchez made some remarks on the second volume of the Paris Observatory Star Catalogue, presented to the Academy. The Catalogue contains stars between the right ascensions 6h. and 12h., and about 500,000 observations made at Paris during the last fifty years have been utilized in its construction.—On the colour sensations excited in one eye by coloured light which illuminates the retina of the other, by M. A. Chauveau. From the experiments described it appears that the excitation of one retina by coloured light influences, not only the optic nerves of this retina, but also those of the opposite side, so that the latter are able to awaken the sensation of the colour employed whilst the excited retina only sees the complementary colour. Thus, if a white surface be observed for a short time through a bit of coloured glass, using only one eye, and screening the other, when the glass is taken away the white ground appears to be tinted with a colour complementary to that of the glass. This is an old experiment, but the point is that if the first eye be closed and the screened eye opened the white surface appears to be tinted with the same colour as the glass.—Observations of the asteroid discovered by Charlois on August 28, made with the *coudé* equatorial of Algiers Observatory, by M. F. Sy. Observations for position were made on August 31 and September 7.—Observations of Wolf's comet (1884 *e* III.) made with the *coudé* equatorial (0·36m. aperture) of Lyons Observatory, by M. G. Le Cadet. Observations for position were made on September 9, 10, 11, and 12.—On the partial eclipse of Jupiter's first satellite by the shadow of the second, by M. J. J. Landerer. This phenomenon occurred on August 14.—The metamorphoses of *Acridium peregrinum*, Oliv., by M. Charles Brongniart. The author has specially observed that locusts undergo various colour changes at different stages of their existence.—On the grafting of underground portions of plants, by M. Lucien Daniel.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Mechanics for Beginners; Part 1, Dynamics and Statics: Rev. J. B. Lock (Macmillan).—Manual of the Science of Religion: Prof. P. D. C. de la Saussaye; translated by B. S. Colyer-Fergusson (Longmans).—Solutions: Prof. Ostwald; translated by M. M. P. Muir (Longmans).—Principles and Practice of Plumbing: S. S. Hellyer (Bell).—Lunar Radiant Heat: O. Boeddicker (Williams and Norgate).—The Universal Atlas, Parts 1 to 6 (Cassell).—Mayhew's Illustrated Horse Doctor, revised and improved: J. I. Lupton (Griffith).—Foods for the Fat, 3rd edition: Dr. Yorke-Davies (Chatto).—On the Adjustment and Testing of Telescopic Objectives: T. Cooke and Sons (York, Johnson).—Die geographische Verbreitung der Säugetiere: Dr. A. Nehring (Berlin, Pormetter).—De Klimaten der Voorwereld en de Geschiedenis der Zon: E. Dubois (Batavia, Ernst).—Economic Journal, No. 3 (Macmillan).—Journal of the Asiatic Society of Bengal, Vol. lix., Part 2, Nos. 4 and 5; Vol. lix., Part 2, Supplement No. 2; Vol. lx., Part 2, No. 1 (Calcutta).—Journal of Physiology, vol. xii., No. 4 (Cambridge).—Calendar of the University College of Wales, Aberystwyth, 1891–92 (Manchester, Cornish).—Psychology: F. S. Granger (Methuen).—Studies in Jewish Statistics: J. Jacobs (Nutt).—Diphtheria: Dr. R. Thorne Thorne (Macmillan).—Experiments in Aërodynamics: S. P. Langley (Washington).—The Story of the Heavens, 18th Edition: Sir R. S. Ball (Cassell).—Deutsche Seewarte—Indischer Ozean, Ein Atlas (Hamburg, Friederichsen).—Arithmetical Exercises in Chemistry: Dr. L. Dobbin (Edinburgh, Thin).—La Transcaucasie et la Péninsule D'Apchéron: C. S. Gulbenkian (Paris, Hachette).—Ueber die Finnländischen Rapakiwigesteine: J. J. Sederholm (Wien, Hölder).—Studien über Archäische Eruptivgesteine aus dem Südwestlichen Finnland: J. J. Sederholm (Wien, Hölder).—The Eocene and Oligocene Beds of the Paris Basin: Harris and Burrows (Stanford).—Versuch über die Erdgeschichtliche Entwickelung: Dr. G. Pfeffer (Hamburg, Friederichsen).

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