

to discuss subjects of mutual interest when it was time to part. It was all too short for any lover of Paris, for no lover of brightness and beauty leaves Paris without regret. Some departed for the shell-scarred battlefields of the greatest war in history; others, ere they returned to the routine of their lives, gave one more glance at the gardens of the Tuileries lying in the golden sunshine of the perfect July afternoon as it brought out all the vivid colours of the flowers grouped with such unerring taste.

Memories of the past had been crowding in all that week; did not the word "Sorbonne" at one time import everything that strove against scientific enlightenment, and connote everything that stood for the obscurantism of the Middle Ages?

The historically minded could not but recall that it was in the gardens of the Tuileries one day in 1819 that Laennec devised the first stethoscope. He had been watching some children place their ears on logs of wood to hear sounds conveyed through them, and, seizing on the principle underlying the children's play, he soon invented the stethoscope, one of the earliest instruments of modern medicine.

As we strolled across the gardens we gave a parting glance at the sun-bathed roofs of the Louvre, the most magnificent palace in Europe, a building the history of which is an epitome of the wonderful story of France herself—of her glories, her triumphs, her crimes, and her sorrows. D. FRASER HARRIS.

University and Educational Intelligence.

THE Patent Office Library is open to the public daily except on Sundays, Good Friday, Christmas Day, Whitsun Eve, and Bank Holidays. On and after October 1 the hours of opening will be from 10 a.m. to 9 p.m., except on Christmas Eve and Easter Eve, when the library is closed at 4 p.m.

DR. R. M. CAVEN has been appointed to the chair of inorganic and analytical chemistry in the Royal Technical College, Glasgow. This vacancy was caused by the transfer of Dr. F. J. Wilson to the chair of organic chemistry in succession to Dr. I. M. Heilbron, who was recently appointed professor of organic chemistry in the University of Liverpool. Dr. Caven was for many years lecturer in chemistry at University College, Nottingham, a position he resigned to become Principal of the Darlington Technical College.

THE new session of the Battersea Polytechnic opens on Tuesday, September 21. A general introductory course has been arranged for students desiring either to qualify for the scholarship or entrance examinations of any of the diploma courses, or to take the Matriculation Examination of London University before taking up a science or engineering degree course. Day and evening courses are provided for those desirous of taking the Intermediate and Final Examinations of London University in science (pure and applied) and in music. Day courses are also available in engineering and other technical subjects, including teachers' courses in sanitary and domestic science. Evening courses are wider in scope; engineering, physics, photography, languages, music and domestic science are among the subjects with which the lectures will deal. Full particulars of all the courses will be found in the Polytechnic Calendar, which can be obtained from the secretary.

A COMBINED effort is at present being made by students and friends of the City and Guilds Engineering College, the Royal School of Mines, and the Royal College of Science in support of the Imperial College War Memorial scheme. The first object in view is the

erection in the college buildings of simple memorial tablets bearing the names of the old students—some three hundred in all—who fell in the war. Closely connected with this purpose, and arising out of the desire of ex-Service men and relatives of the fallen to do something of permanent practical value for the students of the college, is the scheme for the acquisition of a sports field. This particular provision for physical development has hitherto been lacking at the Imperial College, and the enterprise now on foot aims at supplying what is generally admitted to be an essential part of the equipment of an educational institution. In response to an appeal issued in May last for 12,000*l.* to enable the scheme to be carried out in its entirety, a sum of more than 6000*l.* has already been subscribed or promised. This has been considered sufficiently encouraging to warrant the acquisition of a suitable ground over which an option had been secured, and the committee is now appealing to all old students and other friends of the Imperial College who have not so far subscribed to take their share in providing the balance of the purchase price and the cost of equipment.

Societies and Academies.

PARIS.

Academy of Sciences, August 17.—M. Henri Deslandres in the chair.—G. Humbert: The expression of a non-Euclidean area of the fundamental domain related to an indefinite Hermite form.—T. Carleman: Singular integral equations with a real and symmetrical nucleus.—M. Galbrun: The deformation of a helical spring the extremities of which are constrained.—L. Barbillion and M. Dugit: A new class of measuring apparatus for the direct evaluation of magnitudes which are functions of two variables. Forms of apparatus now in use, based on the determination of the position of intersection of two rectilinear needles with reference to a curve, are liable to errors of parallax which are difficult to reduce. The type now described is based on the use of a rectilinear needle and a curved needle rotating on a common axis. Two examples of application of the method are suggested: speed indicators for aeroplanes and control of carburettor in internal-combustion motors.—C. Nordmann: The absorbing powers of the atmospheres of stars. A method of comparing them and of determining the minimum numerical values.—H. Gault and R. Weick: A case of isomerism in the series of the aromatic α -keto-acids. In addition to the two isomers of phenylpyruvic acid described by the authors in a recent paper, a third isomer has now been isolated, and the conditions under which these isomers can be transformed into the other forms have been worked out. A study of the reactions of these three compounds leads to the conclusion that two are stereo-isomers possessing the enolic form, and the third is the ketone.—R. Fosse: The synthesis of a second diamide, oxamide, by the oxidation of sugar and ammonia. Oxamide has been isolated as one of the products of oxidation of cane-sugar in presence of ammonia by calcium permanganate.—MM. Tiffeneau and Orékhoff: The hydrobenzoin transformation. The influence of the nature of the reagent. With the exception of the case of triphenylglycol, which reacts in the same manner with different dehydrating agents, according as strong or dilute sulphuric acid is employed, the dehydration of the alkylhydrobenzoinis may take place in various ways.—H. A. Brouwer: The nature of the diamond-bearing conglomerate of Diamantina, Brazil.—P. W. Stuart-Menteath: The tectonic of the Western Pyrenees.—J. Kunstler: A treatment preventive of

oidium. A handful of sulphur is distributed round the roots of the vine at a depth of 10 to 20 cm.—**P. Wintrebert**: The time of appearance and mode of extension of the sensibility at the surface of the tegument in fishes and amphibians.—**C. Levaditi**: An attempt at the culture of the organism of syphilis in symbiosis with the cellular elements. The culture *in vitro*, in contrast with the virus of poliomyelitis and rabies, not only did not grow, but rapidly lost its vitality and virulence.—**F. Grenet**: The appearance of alcoholic yeast in vineyards. It was noted by Pasteur in 1878 that although mould-spores could be found on the stems of the vines and in the soil at all periods of the year, alcoholic yeast appeared only at the time the grape ripened. The cause of this has now been traced to the fly, *Drosophila melanogaster*, which carries the yeast-spores, and appears in the vineyards only when the grapes are ripe. The origin of the fly has not been traced, nor is it known whence it obtains the yeast-spores.—**E. Joltrain**: The value of Bordst's fixation reaction in the diagnosis of plague. This reaction has rendered great service in cases of doubt in convalescents, and when search for the bacillus has given negative results.—**C. Gessard**: Sub-races of the pyocyanoid bacilli.—**L. Scheffler, A. Sartory, and P. Pellissier**: The use of silicate of soda in intravenous injections: physiological and therapeutical effects. Sodium silicate solutions may be utilised for intravenous injection in doses worked out empirically. The treatment is beneficial in cases of arterio-sclerosis, in cardio-renal troubles, and in chronic rheumatism. The treatment of tuberculosis by this method is under consideration.

ROME.

Reale Accademia dei Lincei, May 2.—**A. Róiti**, vice-president, in the chair.—**S. Pincherle**: Complete iteration of x^2-2 . The problem has not been resolved for a non-linear function except in very limited cases, of which this is an example.—**O. Tedone**: Some other formulæ of inversion connected with Riemann's method of integration. These formulæ have applications to certain mechanical problems, such as finite wave-motion in an elastic fluid.—**F. Millosevich**: Blödite and other minerals of the saline deposits of Monte Sambuco, in the territory of Calascibetta, Sicily. The salt deposits on the southern face of the mountain, which is in the province of Caltanissetta, are worked by three tunnels, of which the upper cuts through a deposit of hard salt containing local aggregates of the present mineral, which is synonymous with astrakanite, and occurs in two forms, one of which is coloured by iron oxide. The crystallographic data are given, and the analysis indicates the composition $\text{Na}_2\text{SO}_4 \cdot \text{MgSO}_4 \cdot 4\text{H}_2\text{O}$.—**E. Bompiani**: Point transformations between varieties which satisfy Levi-Civita's parallelism.—**R. Raineri**: Tripoli Corallinaceæ, iii. The species dealt with are *Corallina officinalis*, L., *C. mediterranea*, Areschoug, and *Peyssonelia rubra*, Grev.—**Anna Foà**: Excretory system of the silkworm. The peri- and endo-cardiac and peritracheal glands form a system for the excretion of certain substances probably having an acid reaction. A figure is given of a silkworm injected with carmine and Chinese ink.—**A. Pais**: Convalescence of chronic malaria by X-rays.—Commenting on the foregoing paper, Prof. **B. Grassi** concludes that in the sequelæ of malaria these rays, when opportunely used, have an almost marvellous curative effect, when other remedies, such as quinine, arsenic, iron, diet, and change of air, are much more tardy and uncertain in their action. On the other hand, these remedies can be usefully employed, especially in rebellious cases, in conjunction with ray treatment,

but the latter has been shown to be suitable for adoption in every malarial district.—**G. Amantea**. Spermatic secretion, x. The elimination of the sperm in the cavy and rat.—**Prof. Róiti** and **Castelnuovo** referred to the deaths of Theodore Reye, Zeuthen, and Hurwitz; and Prof. Levi-Civita presented reports by **C. Guidi** on the strength of dykes, and by **M. Panetti** on the aerodynamic laboratory adjoining the Polytechnic of Turin.

May 16.—**F. D'Ovidio**, president, in the chair.—**A. Angeli**: Reactions of some ortho- and para-substitute derivatives of benzol.—**Anna Foà**: Excretory system of the silkworm, ii. The rectal portions of the Malpighian tubes (with three illustrations).—**G. Cotronei**: Identity of metamorphoses of Amphibia anura and urodela.

Books Received.

A Geographical Bibliography of British Ornithology from the Earliest Times to the End of 1918. Part 6. Pp. viii+481-558. (London: Witherby and Co.) 6s. net.

Lead: Including Lead Pigments and the Desilverisation of Lead. By Dr. J. A. Smythe. Pp. vii+120. (London: Sir I. Pitman and Sons, Ltd.) 3s. net.

Athena: A Year-Book of the Learned World. (The English Speaking Races.) Edited by C. A. Ealand. Pp. viii+392. (London: A. and C. Black.) 15s. net.

Handbook of Patent Law of all Countries. By W. P. Thompson. Eighteenth edition, completely revised. Pp. vii+157. (London: Stevens and Sons, Ltd.) 6s.

Ancient Egypt. Part iii., 1920. (London: Macmillan and Co., Ltd.) 2s. net.

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