

sorbed in their own fields of study or research, and give little time or thought to the larger problems of university life and university progress. Such a body as this ought to furnish the opportunity and the incentive towards such thinking.

Such an organisation of university teachers ought to accomplish much in the creation of what one might call professional consciousness. It will help towards a more definite appreciation on the part of teachers themselves, and on the part of the public, of what it means to be a university teacher. The association will well hope in time to grow into an influence comparable in the case of university teachers to that exercised by the American Bar Association for lawyers or by the American Medical Association for physicians. Hitherto there has been little of professional solidarity amongst university teachers. The term professor has had with us a very indefinite meaning. It has been applied unthinkingly to secondary-school teachers, college teachers, university teachers, and to many whose connection with teaching is most remote. In this uncertainty lie certain difficulties which the association will meet, for in the public mind there is as yet no very clear differentiation between the university professor and the secondary-school teacher, just as many of our universities are such in name only.

The plans of the Association of University Professors have not yet been worked out to the point of detailed organisation. Doubtless those who have the matter in charge have in mind a somewhat loose organisation like that of the lawyers rather than a highly detailed organisation like that of the physicians. So far as the plan has as yet developed, it contemplates nothing further than the formation of a body representative of university teachers, a body in which questions affecting the work of the university and the interests of teachers, the relations of schools and colleges, and similar questions, may be discussed from the point of view of university teachers, and which may present to university bodies and to the public a statement of such questions from the point of view of the profession itself. Those who have to do with universities and colleges, whether as trustees, presidents, or teachers, will welcome this movement heartily.

The foundation's earlier studies of medical education are continued in this report in recommendations for changes in the classification of medical schools; a study of medicine and politics in Ohio; and a survey of medical education on the Pacific coast, which shows that the State of Washington, which has no medical school, has a plentiful supply of physicians trained in good schools all over the country, while California, with eight medical schools, is swamped with poorly trained doctors.

The report concludes with a discussion of "Standards and Standardisers," which shows that the Carnegie Foundation has had little to do with the setting up or enforcement of college standards, this being the work of college faculties. All that the foundation has done is to cause fuller discussion of such matters and to urge the claims of honesty and sincerity.

#### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

A BURSARY in memory of Mr. Robert Hepburn has been founded by his sister at University College, Dundee. It will be tenable for three years, and open to any male or female student of medicine at the college.

PROF. W. MORGAN, who fills the chair of automobile engineering in the faculty of engineering of the University of Bristol, has been released from his

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duties for the period of the war. He will, we understand, be engaged upon work in connection with the production of munitions.

THE governors of Guy's Hospital have received from the trustees and executors of the will of the late Sir William Dunn 25,000*l.* new War Loan 4½ per cent. fully-paid stock for the endowment of a lectureship in pathology in the Guy's Hospital Medical School, to be known as the "Sir William Dunn Lectureship in Pathology."

In connection with the erection of the permanent buildings of the University of Western Australia, two prizes of a hundred guineas and twenty-five guineas respectively were offered for the two best designs for the laying out of the University's grounds at Crawley Park, Perth, W.A. A large number of designs were sent in, and the following awards have now been made by the board of adjudication:—First prize, H. Desbrowe-Annear, Melbourne, Victoria; second prize, H. W. Hargrave, Perth, W.A. The design submitted by Messrs. J. Cheal and Sons, Ltd., Crawley, Sussex, has in addition been granted an honourable mention.

WE are requested to make known that the latest date for the receipt of applications from candidates desiring to be examined at Local Centres for the Aitchison Memorial Scholarship is September 1, and from those who wish to be examined in London, September 15. Applications should be made to Mr. H. F. Purser, 35 Charles Street, Hatton Garden, E.C. It will be remembered that the scholarship in question was founded in memory of the late Mr. James Aitchison, in consideration of the many and valuable services rendered by him to the optical industry and the development of optical education, and specially in recognition of his unselfish and constant endeavour to secure better training for optical students. The scholarship course, tenable at the Northampton Polytechnic Institute, Clerkenwell, covers two years, and its total value is 30*l.* It is proposed to offer the scholarship in alternate years.

#### SOCIETIES AND ACADEMIES.

##### PARIS.

Academy of Sciences, August 17.—M. Ed. Perrier in the chair.—Paul Appell: Contribution to the study of the  $\Theta$  functions of higher degrees.—W. Kilian and Antonin Lanquine: The coexistence, in the neighbourhood of Castellane, of pyreneo-provençal dislocations and of Alpine folds, and on the complexity of these orogenic phenomena.—Joseph Pérès: Bessel's functions with several variables.—H. G. Block: The equation of elastic rods.—José Rodríguez Mourelo: The phototropy of inorganic systems. The case of calcium sulphide. These sulphides were made by heating precipitated chalk (100 gr.), common salt (0.1 gr.), sodium carbonate (0.03 gr.), sulphur, and certain phosphorogens, such as manganese and bismuth salts. The colour develops in a strong light, not sunlight, in two or three minutes. In one set of experiments the proportion of manganese added varied between 0.1 per cent. and 0.0001 per cent. The observed colours passed through reddish-violet, pink, to an intense violet, the maximum phototropic effect being obtained with 0.005 per cent. of manganese. The colours were increased in intensity by the addition of both manganese and bismuth.—M. Pontio: A method of control for rapidly estimating the quantity of nickel deposited in nickel plating. The method is based on the use of a solution of dilute hydrochloric acid and hydrogen peroxide, which attacks the underlying metal (copper, iron) more rapidly than the deposited nickel.—Alberto Betim: A layer of euxenite in Brazil. This deposit

was found near Pomba (Minas-Geraes), Brazil. A spectrographic analysis of the mineral showed the presence of titanium, niobium, yttrium, ytterbium, erbium. Chemical analysis proved uranium (4 to 11 per cent. of the oxide), thorium, traces of cerium, tin, arsenic, lead, gallium, and gold.—Ed. **Delorme**: A new mode of grafting the flexor tendons of the fingers. In cases of severe wounds of the palms of the hands, with loss of one or more of the flexor tendons, an operation has been devised, full details of which are given, in which portions of the flexor tendon of the fore-arm are grafted over on to the hand.—E. **Kayser**: Contribution to the study of the ferments of rum. It is shown that the use of the microscope can render great services in rum manufacture: it can prove contamination, and direct the fermentation to obtain products of constant composition.—Em. **Bourquelot** and A. **Aubry**: The influence of soda on the synthetic and hydrolytic properties of  $\alpha$ -glucosidase (glucosidase from low yeast, air dried). A set of ten experiments, in which the proportion of caustic soda was gradually increased, gave results showing that the synthetic reaction was not sensibly affected so long as the mixture remained acid. In a neutral mixture the reaction does not attain its normal equilibrium, and with distinct alkaline reaction the synthetic reaction stops, although no secondary isomerising reactions have been set up by the alkali.

## NEW SOUTH WALES.

**Linnean Society**, June 30.—Mr. A. G. Hamilton, president, in the chair.—A. R. **McCulloch**: Notes on, and descriptions of, Australian fishes.—H. S. H. **Wardlaw**: The temperature of *Echidna aculeata*. The temperature of *Echidna* shows a regular daily variation of about 3° C., its morning temperature being about 30° C., and its afternoon temperature about 33° C. These temperatures are considerably lower than the temperatures of most other mammals (37° C.). During winter in Sydney, *Echidna* hibernates for short periods at a time. During the periods of hibernation, its temperature sinks almost to the level of the air, so that *Echidna* behaves like a cold-blooded animal.—R. J. **Tillyard**: The development of the wing-venation in zygopterous dragon-flies, with special reference to the Calopterygidae. The paper deals with the tracheation of the larval wing in the genera *Calopteryx* (Palæarctic) and *Diphlebia* (Australian), the only two genera of the Calopterygidae available for study. The results are most important, since they establish the fact that, throughout the suborder Zygoptera, the radius is unbranched, whereas in the Anisoptera it always possesses a branch, known as the *radial sector*, which crosses over the two most distal branches of the media. In the Anisoptera, the media has only three branches besides the main stem. In the Zygoptera it has four. The extra branch lies between  $M_2$  and  $M_3$ , and is *analogous* to, but not *homologous* with, the radial sector. For this newly demonstrated branch the name *zygopterid sector* is proposed, with the notation  $M_s$ , to preserve the analogy with the radial sector  $R_s$ . Important results following from this are (1) that the crossing of  $R_s$  over  $M_{1-2}$  no longer separates the Odonata from all other insects; (2) that the dichotomy between Anisoptera and Zygoptera becomes far more pronounced than heretofore, by the basic difference in the condition of the radius in the two suborders; (3) that Handlirsch's fossil suborder, Anisozygoptera, must be dropped; all these fossils, tested by the character of the radius, become true Zygoptera.—Dr. S. J. **Johnston**: *Moreauia mirabilis*, gen. et sp. nov., a remarkable trematode parasitic in *Ornithorhynchus*. This worm lives in the anterior part of the intestine of the platypus, in the

spaces between the transverse folds of the mucous membrane, where it lies completely hidden. It is remarkable in its lateral expansion, being five times as broad as it is long. It is so different in its structure from known forms that it is looked upon by the writer as the representative of a new subfamily with fairly close affinities to *Liolopinæ*.

## BOOKS RECEIVED.

The Yearbook of the Universities of the Empire, 1915. Pp. xii+717. (London: H. Jenkins, Ltd.) 7s. 6d. net.

The National University of Ireland. Calendar for the year 1915. Pp. clxxxiv+583. (Dublin.)

Thèses présentées à la faculté des Sciences de l'Université de Paris. Série A. No. 764. Pp. 155. (Marseille: Barlatier.)

Outlines of Sociology. By Prof. F. W. Blackmar and Dr. J. L. Gillin. Pp. viii+586. (New York: The Macmillan Company; London: Macmillan and Co., Ltd.) 8s. 6d. net.

Elementary Algebra. By F. Cajori and L. R. Odell. Pp. vi+206. (New York: The Macmillan Company; London: Macmillan and Co., Ltd.) 3s. net.

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