

the total number of students. Many teachers, however, were strongly in favour of the movement, contending that the establishment of universities in the large industrial and commercial centres was an essential and necessary element in modern conditions of life. It was a movement which should be strenuously supported. Side by side with this question arose that of the standard required for the doctorate. The congress considered it should be made imperative for all universities to demand a thesis embodying independent and original research work from the candidate.

THE second annual report of the King Edward VII. British-German Foundation states that there is an increase in the expenditure, due to a larger number of cases assisted, and to the fact that several of the permanent allowances have been raised. We learn from *The Times* that in accordance with the terms of the trust deed, which provides for an annual joint sitting of the two sections of the foundation, alternately in England and Germany, the first joint conference was held last September, at Sir Ernest Cassel's residence in London. The question of the best way of employing the surplus funds was discussed, and it was agreed finally to adopt the following resolution:—"That a certain proportion of the surplus funds of the German section be employed in enabling British subjects to attend or visit universities, schools, institutes, or business establishments in Germany, or to reside in Germany, and that a certain proportion of the surplus funds of the British section be employed in enabling Germans to attend or visit universities, schools, institutes, or business establishments in the United Kingdom, or to reside in the United Kingdom." It is hoped that this scheme will serve to assist students who are not possessed of the necessary means in pursuing a course of studies abroad, and give them an insight into the customs and character of the German people, affording them an opportunity of making lasting friendships with Germans, and thus help in promoting a good understanding between the two nations. The second joint conference of the two sections was held in Berlin on October 25. Its main object was to discuss the merits of the scheme of studentships and the desirability of continuing it.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, October 20.—M. F. Guyon in the chair.—**Pierre Termier**: The XI excursion of the twelfth International Geological Congress: the Appalachian region of Canada.—**R. Lépine** and **M. Boulud**: The presence, in the vascular walls, of a ferment setting free a reducing sugar at the expense of the virtual sugar of the blood, and capable of hydrolysing phloridzin. These experiments show that the vascular walls possess a new function, hitherto ascribed to the liver alone.—**Léon Lichtenstein**: Some applications of the notions of functions of an infinity of variables in the calculus of variations.—**François Lukács**: Laplace's series.—**Pierre Idrac**: Experimental researches on the *vol plané*. Photographic experiments with small balloons show that in places where birds are capable of hovering flight there is an ascending current of air with velocities of the order of 3 to 4 metres per second. This corresponds to the magnitude of the velocity of air currents in the *vol plané* of an *aéroplane*.—**R. Fortrat**: An abnormal Zeeman phenomenon with the sodium doublet, $\lambda=2853$. The use of a ferro-cobalt electromagnet, made according to the indications of P. Weiss, enabled the author to place an ordinary spark in a field of 49400 Gauss. The experimental results obtained agree closely with the theory of Voigt.—**Raoul Dupuy**: Functional arte-

rial hypertensions. Pseudo-arterio-sclerosis. A discussion of the means of differentiating arterio-sclerosis from functional hypertension.—**P. Chaussé**: The path of penetration of the tuberculous virus in the calf and the tuberculigenic power of cow's milk. Inhalation is the usual mode of tuberculous infection in the young calf; intra-uterine infection must also be taken into consideration, since the latter furnishes an important proportion of the graver cases. Although the calf is much more exposed than the adult animal to infection through the alimentary canal, this is relatively the least important mode of infection. The milk of the cow is not the cause of infection of the calf to any great extent.—**J. Danysz**: The use of some new medicinal combinations in the treatment of trypanosomiasis. A compound obtained by the action of silver nitrate upon arsenobenzene, was found capable of sterilising the blood of rabbits infected with Surra by a single injection. *Trypanosoma rhodesiense* was more resistant but succumbed to a mixture of the above reagent with trypan red.—**Jules Amar**: The physiological effects of work and the degree of fatigue.—**R. Anthony**: The experimental study of the factors determining the cranial morphology of mammals deprived of teeth.—**J. Chaîne**: The *îlots* of the Termites.—**M. Lemoigne**: The butylene-glycollic fermentation of glucose by staphylococci.—**Lucien Mayet** and **Jean Pissot**: The discovery of the engraved bone of a mammoth showing a human figure, in the upper Aurignacian layer of La Colombière, near Poncin. The drawing described would appear to be the first engraving of man of the middle Quaternary epoch.—**Jean Boussac**: The geological constitution of Haute-Tarentaise.—**F. Dienert**: Remarks concerning some experiments with fluorescin.

BOOKS RECEIVED.

Records of the Indian Museum. Vol. viii., Zoological Results of the Abor Expedition, 1911-12. Part 3. September. Pp. 191-231+plates. (Calcutta.) 2 rupees.

Memoirs of the Indian Museum. Vol. iv., No. 1, An Account of the Crustacea Stomatopoda of the Indo-Pacific Region, based on the Collection in the Indian Museum. By S. Kemp. Pp. 217+plates. (Calcutta.) 15 rupees.

Über Natronzellstoff: seine Herstellung und chemischen Eigenschaften. By Dr. C. Christiansen. Pp. v+154. (Berlin: Gebrüder Borntraeger.) 5 marks.

Einführung in die Mykologie der Gebrauchs- und Abwässer. By Dr. A. Kossowicz. Pp. vi+222. (Berlin: Gebrüder Borntraeger.) 6.60 marks.

Handbuch der Morphologie der Wirbellosen Tiere. Edited by A. Lang. Zweite Begw. Dritte Auflage. 4 Band, 3 Lief. (Jena: G. Fischer.) 5 marks.

A Text-Book of Quantitative Chemical Analysis. By Dr. A. C. Cumming and Dr. S. A. Kay. Pp. xi+382. (London: Gurney and Jackson.) 7s. 6d. net.

Elementares Praktikum der Entwicklungsgeschichte der Wirbeltiere mit Einführung in die Entwicklungsmechanik. By Dr. O. Levy. Pp. viii+183. (Berlin: Gebrüder Borntraeger.) 5.60 marks.

Conseil Permanent International pour L'Exploration de la Mer. Investigations on the Plaiice. General Report. By Dr. F. Heincke. I., The Plaiice Fishery and Protective Regulations. First part. Pp. 153+xxxv+iv plates. Rapports et Procès-Verbaux des Réunions. Vol. xv. Juillet 1911-Juillet 1912. Pp. viii+167. (Copenhagen: A. F. Høst et Fils.)

Technological Museum, Sydney. Technical Education Series. No. 18, Cabinet Timbers of Australia. By B. F. Baker. Pp. 186+lxviii plates. (Sydney.)

Les Lois Empiriques du Système Solaire et les Har-