

improvement of knowledge, with the accompanying stimulus of potential discovery; this was the atmosphere that should enfold every earnest student who entered the portal of a modern University.

THE new department of pathology of the University of Oxford was formally inaugurated on Saturday last. The building, which has been erected at the cost of about 10,000*l.* (5000*l.* of which was the gift of Dr. Ewan Fraser, of Balliol College), occupies a site at the back of the University Museum. It is rectangular in shape, measuring 75 feet by 65 feet, and consists of a basement and two storeys, the rooms being grouped round a central vestibule. Amongst the latter are a lecture room, a museum, laboratories for the teaching of morbid histology and of bacteriology, research rooms for work in experimental pathology and in chemical pathology, and various store rooms, attendant's work room, workshop, and cold-room are also provided. Sir William Church, president of the Royal College of Physicians, in delivering the opening address, said that the eightieth anniversary of the birthday of the Nestor of pathological research, Prof. Virchow, being that day celebrated, Oxford could not in a more worthy way pay its homage to the veteran man of science. Just at the time that their museum was being erected, Prof. Virchow gave to the world his memorable work, "Die Cellular Pathologie," which placed pathology on a new foundation and taught them to regard pathological processes as the perversion of physiological ones, influenced by various disturbing agencies. Pathology could not be studied without physiology, neither could physiology in its completeness be carried on without pathology, and more especially had this become manifest since they had been acquainted with the part played by micro-organisms in the universe, and the influence they had on living structures. A knowledge of both physiology and pathology was indispensable for those who would practise medicine; but to regard pathology as a mere adjunct to medicine was to take a narrow and erroneous view of the processes of nature. As a physician he could not but regard with extreme satisfaction the addition which had been made to the opportunities afforded to their medical graduates for the acquisition of scientific knowledge, but he was far from looking upon the technical work which would be done in direct connection with medicine as the only, or, indeed, the main, advantage which would accrue from it. Pathology at the present time was, above all others, that section of medical science which offered the widest promise of progress, and by the original research which under the guidance of the able head of their pathological department would there be carried on, he trusted that real advances in knowledge might be made which both directly and indirectly might benefit mankind, and that in pathology, as in the other departments of science, Oxford might hold an honourable record.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, October 7.—M. Bouquet de la Grye in the chair.—On the extension of a formula of Euler and on the calculation of the principal moments of inertia of a system of material points, by M. K. Bohlin.—General properties of couples of kinematic elements, by M. G. Koenigs.—The action of urethane on pyruvic acid, by M. L. J. Simon. Pyruvic acid combines directly with urethane without the use of any condensing agent, the compound $\text{CH}_3\text{C}(\text{NH}.\text{CO}_2\text{C}_2\text{H}_5)_2\text{CO}.\text{OH}$ being formed. The ethyl ester of this substance can also be obtained by condensation of ethyl pyruvate with urethane, but in this case a little hydrochloric acid is necessary to assist the reaction. Boiling with dilute acid readily regenerates the pyruvic acid.—On monobromomalonic dialdehyde, by M. R. Lespieau. This substance is formed by the action of bromine in bright sunlight upon the substance $\text{CHBr}:\text{CBr}.\text{CH}_2\text{OCH}_3$. Owing to its forming a potassium salt it was at first taken for an acid, but its aldehydic nature is clearly established by its reactions with Schiff's reagent, and the formation of phenylbromopyrazol with phenylhydrazine.—On the reducing properties of certain nitric esters, by MM. Leo Vignon and F. Gerin. The nitric esters derived from methyl and ethyl alcohols, glycol and glycerol do not reduce an alkaline copper solution. Tetranitroerythritol possesses faintly reducing properties whilst a strong reduction is produced by the nitrates of dulcitol and mannitol.—Experimental researches on the excitability of the spinal marrow, by M. Alex. N. Vitznou. It is

shown that, contrary to the results of previous experimenters, the grey matter of the spinal column can be excited by electric currents, and that there is a clear difference between the reactions which are produced as a consequence of the stimulation of the antero-lateral cords and those resulting from the stimulation of the grey matter, the latter producing generally tetanic movements. The grey substance can also be excited by simply mechanical means, if care be taken that there is as little loss of blood as possible during the preliminary operation.—The influence of spermatotoxin upon reproduction, by Mlle. C. de Leslie. If some spermatotoxic serum furnished by a guinea-pig is injected into a white mouse, the latter loses its power of reproduction, the sterility being maintained for from sixteen to twenty days.—On the liberoligneous elements of ferns, by MM. C. Eg. Bertrand and E. Cornaille.—Double flowers and parasitism, by M. Marin Molliard. In two cases (*Primula officinalis* and *Scabiosa Columbaria*) in which a tendency to form double flowers was observed, it was found that the roots were attacked by parasitic fungi, and it appears very probable that it is to these parasites that the changes in the flowers must be attributed. The author points out that these facts may have important applications in practical horticulture.—An experimental contribution to the study of the physical signs of intelligence, by M. N. Vaschide and Mlle. M. Pelletier. As the result of measurements made on more than 300 children it was found that the cephalic development of the intelligent subjects was different from an anthropological point of view from the unintelligent subjects. The most marked difference is in the magnitude of the auriculo-bregmatic measurement.

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