

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

OXFORD.—On February 20 Congregation took in consideration certain amendments to the statute establishing the status of advanced student, the preamble of which was passed on February 6. An amendment substituting the title of Doctor of Philosophy for that of Doctor of Letters or Doctor of Science, in the case of the degree to be obtained under the statute, was proposed by Mr. Ball, fellow of St. John's College, and Prof. A. C. Clark, Corpus professor of Latin. It was supported by Mr. Barker, fellow of New College, and opposed by Mr. Walker, fellow of Queen's, and Dr. Marett, reader in anthropology. On a division it was carried by eighty-nine to nineteen. Another amendment, proposed by Dr. Schiller, fellow of Corpus, and Dr. Grenfell, fellow of Queen's, which would have had the effect of abolishing a written examination for the new degree, was rejected by thirty-seven to fourteen. Under the former amendment the existing degrees of D.Sc. and D.Litt. will remain unaffected by the new enactment.

SIR JOHN BLAND-SUTTON has been appointed to deliver the next Bradshaw lecture at the Royal College of Surgeons of England.

DR. J. M. PURSER has been appointed Regius professor of physic in the University of Dublin, in succession to the late Prof. J. Little.

THE title of associate professor has been conferred by the council of the University of Liverpool upon Mr. J. Wemyss Anderson, lecturer in engineering design and drawing and in refrigeration, and dean of the faculty of engineering, in the University.

It has been decided to make the erection of new science buildings for the University College of North Wales, Bangor, the North Wales memorial to men fallen in the war. The cost of the scheme will be 150,000*l.*

MR. D. M. FORBES, who died on December 13 last, has bequeathed to the University of Edinburgh his books relating to the Philippine Islands, and the residue of his property, which, with the property abroad, will amount, it is understood, to about 100,000*l.*, for the purposes of education.

A NEW chair of "social providence and assistance" has been established in connection with the Collège de France, the funds for the maintenance of which will be provided by the Municipal Council of Paris and the General Council of the Seine. The teaching given from the chair will deal largely with sickness assurance, invalidism, old age, and infant protection.

THE following courses of lectures are announced for delivery at the Royal College of Physicians of London:—The Milroy lectures, by Dr. W. J. Howarth, on "Meat Inspection," on February 22, 27, and March 1; the Lumleian lectures, by Dr. G. A. Sutherland, on "Modern Aspects of Heart Disease," on March 13, 15, and 20; and the Goulstonian lectures, by Dr. C. H. Miller, on "Paratyphoid Infections," on March 22, 27, and 29.

THE Department of Agriculture and Technical Instruction for Ireland has issued its programme of summer courses of instruction for teachers to be held during the present year. With the exception of the course in rural science, which begins on August 7, all the courses will commence on July 3 and close on July 27. Teachers who attend the courses regularly and punctually will be allowed 3*l.* 10*s.* towards their expenses while living at the instruction centre, and third-class railway fare for one return journey. The courses are open only to teachers who are more than

twenty years of age and engaged by local committees of technical instruction or in schools receiving grants from the Department. Among the subjects in which instruction is offered may be mentioned wool dyes and dyeing, internal-combustion engines, housewifery, hygiene and sick-nursing, manual training (wood-work), and rural science (including school gardening).

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, February 8.—Sir J. J. Thomson, president, in the chair.—Lord Rayleigh: The dynamics of revolving fluids. The fluid is supposed to be devoid of viscosity and the motion to be at all times symmetrical about an axis. In accordance with Kelvin's general theorem the circulation remains constant for each ring of fluid. In equilibrium the rings of fluid must be so arranged that the circulation is in cylindrical layers, and if the equilibrium is to be stable the circulation must increase outwards. An example is taken from fluid originally rotating like a solid and enclosed by coaxial cylindrical walls. If these close in, a simple vortex motion of increasing intensity is superposed, and the difference of pressures at the walls also increases. When the motion is in three dimensions, exact solutions are scarcely practicable, but some general considerations are appended, suggested by a recent paper of Dr. Aitken.—Prof. H. Lamb: The deflection of the vertical by tidal loading of the earth's surface. This subject has of late excited renewed attention owing to its bearing on observations of lunar disturbance of gravity. The present paper, after discussing a few typical problems, goes on to examine the effect of one or two considerations which have been hitherto left out of account, so far as the author is aware, in such calculations. In the first place, owing to the deformation of the surface and the altered distribution of density, an additional horizontal component of force on the pendulum is introduced. A more important point is that the action of gravity in resisting the deformation is ignored. It is true that the corrections involved are under certain conditions negligible, but they are of some theoretical interest, and it is found that at great distances from the load, and therefore in all cases of a widely distributed load, they may attain considerable relative importance. In attempting to estimate the effect of gravity it has been found convenient, in order to avoid difficulties not altogether of a mathematical kind, to limit the investigation to the case of incompressibility. In the first instance, also, the disturbance in the field of gravity has been neglected in calculating the strains. When the alteration of the field is taken into account a curious point arises. For mathematical simplicity the "earth" has been regarded, as is usual in such investigations, as flat and infinitely extended. It appears that in such a case the surface would be unstable, whatever the degree of rigidity, for disturbances exceeding a certain wave-length. This critical wave-length is, however, enormous, and reasons are given for the view that inferences can legitimately be drawn from the results as to the character of the effects actually produced.—C. F. Brush and Sir R. Hadfield: Spontaneous generation of heat in recently hardened steel. Steel specimens of different composition were hardened and then placed in Dewar vacuum jars so arranged as to have equal thermal insulating efficiency. These were placed inside an air-tight cylinder of thin copper embedded in granulated coke placed in another box surrounded by an air space and a further box. The special apparatus employed is fully described in the paper. Carbon steel, also nickel-chromium steel specially susceptible to hardening, and other steels were then quenched from hardening tem-