

University and Educational Intelligence.

LONDON.—Mr. Charles Manning has been appointed, as from Jan. 1, 1930, to the Sir Ernest Cassel chair of international relations tenable at the London School of Economics.

ST. ANDREWS.—The Senatus Academicus has resolved to confer the honorary degree of LL.D. on the following, on the occasion of the installation of Sir Wilfred Thomason Grenfell as Rector of the University on Nov. 6: Sir Wilfred Grenfell; Sir William Allardyce, formerly Governor of the Falkland Islands, of the Bahamas, of Tasmania, and of Newfoundland; Mr. H. M. Richards, senior chief inspector, Board of Education, London; Sir Arthur Steel-Maitland, late Minister of Labour; and Mr. J. E. Wrench, chairman and editor of the *Spectator*.

THE following scholarships have been awarded by the Council of the Institution of Naval Architects: Fairfield Scholarship in Naval Architecture (1929), £150 a year for four years at the University of Glasgow, to Mr. Samuel M'Murray, of Messrs. Harland and Wolff, Belfast; Denny Scholarship in Naval Architecture (1929), £75 a year for four years at the University of Glasgow, to Mr. C. R. Wynne-Roberts, of Bedford School, Bedford; Parsons Scholarship in Marine Engineering (1929), £150 a year for three years at the City and Guilds (Engineering) College of the Imperial College of Science and Technology, London, to Mr. F. L. Weatherdon, of H.M. Dockyard, Devonport.

WE have received from the Education Section of the British Psychological Society, and from the Child-Study Society of London, copies of memoranda on courses of study in junior schools, prepared at the request of the Consultative Committee of the Board of Education. The Education Section of the B.P.S. makes three recommendations: it is of the greatest importance that psychological grouping should take the place of chronological grouping; the development of the concrete real interests of the children should supersede the hard-and-fast school 'subjects'; and the school should be staffed with teachers who may be safely encouraged to experiment in both curriculum and method, and will be able to make educational use of local and individual interests, whilst keeping a universal, humane, and practical outlook. The report is signed by Mrs. Susan Isaacs and Miss Margaret McFarlane, as chairman and secretary, and may be regarded as authoritative. The Child-Study Society, taking its stand on the principle that in every educational problem the child's point of view should always be taken into account, urges that in the junior school place should be found for subjects which prove stimulating to the child, such as handicrafts, art, music, dancing, acting, organised games. It suggests rambles for Nature study, pictures and dramatisation in history; that models and slides in geography are useful devices that should be abundantly used; and, indeed, that all the resources of modern pedagogy should be drawn on to make work in the junior school vivid, intelligible, and memorable. The memorandum also lays particular stress upon the importance of the junior school taking over the essential features of individual methods, the success of which in the infant school is now beyond question, though at the same time exploiting to the utmost the newer methods in collective teaching, which allow and even encourage the more brilliant scholars to make their own pace. The memorandum is issued by Dr. C. W. Kimmins and Dr. P. B. Ballard, as chairman and vice-chairman of the council of the Society.

No. 3131, VOL. 124]

Calendar of Patent Records.

November 2, 1847.—An improved method of making gelatine medicinal capsules, which was widely adopted later, was probably the invention of a French chemist but was patented in England in the name of James Murdock, the patent agent, on Nov. 2, 1847. The capsule was made in two similar parts, formed by dipping the end of an iron rod of the required dimensions and shape into a solution of gelatine, one part fitting into the other and the two being hermetically sealed together by moistening the overlapping edges. The inventor preferred to use a vegetable gelatine produced from a species of marine moss.

On the same day, Nov. 2, 1847, Anthony Bernard von Rathen, civil engineer, was granted a patent for a compressed air motor-car. A car was built to his specification in the workshops of the Putney College of Civil Engineering and publicly tried on the road between Putney and Wandsworth in August 1849, when it attained a speed of from 8 to 12 miles an hour. Nothing further is known of the machine.

November 3, 1817.—The process of 'gassing' thread and lace, which greatly increased the English lace-trade in the early part of the nineteenth century and rendered it capable of competing with the continental trade, was the subject of the patent granted to Samuel Hall on Nov. 3, 1817, for a "method of improving every kind of lace or net, whether fabricated from flax, cotton, wool, silk, or other substances". The lace is passed over a flame with a motion sufficiently rapid to singe the woolly fibres covering the fabric without injuring the texture of the lace.

November 5, 1895.—A patent that greatly hindered the development of the American motor-car industry was that granted to George B. Selden in the United States on Nov. 5, 1895, which had been applied for in 1879 and thus took sixteen years for the examination before it was finally sealed and the patent rights began to run. The Electric Vehicle Company secured the rights and enforced them, with the help of some of the prominent makers, by charging a royalty of one per cent of the selling price on every petrol vehicle produced in the United States. The patent was upheld in the lower court, but Henry Ford took it to the Circuit Court of Appeals and won his case, the previous decision being reversed.

November 7, 1789.—The patent granted to Ralph Gout, clockmaker of London, for "certain machinery for the purpose of measuring distance, which will ascertain with the greatest precision the number of miles a person travels", on Nov. 7, 1789, was for the first taximeter that appears in the records. The apparatus was in the form of a 'pedometer'—of which instrument also Gout was a patentee—connected by levers and wires with the running wheels of the vehicle.

November 8, 1721.—The first artificial fertiliser to be patented was the invention of John Piper and Matthew Tyndale, Jr., who on Nov. 8, 1721, were granted an English patent for "a certain compound, consisting of prepared chalk and sea-water, which abundantly increaseth all manner of grain, pulse, and grass, beyond what hath been known".

November 9, 1786.—The patent granted to Joseph Geib, musical instrument maker of London, on Nov. 9, 1786, for "a new improvement upon the pianoforte and harpsichord by which the same will become perfect and compleat instruments of their kind, which have never before been discovered, and by which the same can be more easily tuned and played upon", introduced the 'hopper escapement' for square pianos. The new mechanism was first brought out by Longman and Broderip, of Cheapside, the predecessors of Collard and Collard.