

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

MR. AND MRS. HENRY SIDGWICK contribute each 500*l.* to the building fund (11,000*l.* being required) for the new hall to be built at Newnham, Cambridge, for women students, under the "Newnham College Association" for the advancement of education and learning among women in Cambridge. Miss Clough, the principal of Newnham Hall, whose unpaid services are of incalculable value, also gives 500*l.* to this new building, which will include lecture-rooms, &c., as well as residence for thirty. Prof. and Mrs. J. C. Adams, Dr. and Mrs. Bateson, Mr. and Mrs. Peile, &c., are among the large donors, and the Rev. Coutts Trotter, of Trinity College, is a donor of 100*l.*

THE Chemical Laboratory of Newnham Hall, which has cost over 1,000*l.*, is now complete, and will be available for all the students of the Newnham Association. So also will be the Gymnasium and Garden. The Old Newnham Hall company is now merged in the new association, differing from the former in the contributors not being permitted to receive any profits. It is needless to add that the old association did not actually receive any profits, though registered as an ordinary "limited" liability company.

THE main purpose of the Irish University Bill, introduced to the House of Lords on Monday by Government, seems to be the creation of an institution similar to that of London University, prepared to grant degrees to all comers. In order to do this Government propose to establish a new University, to consist of a Chancellor and Senate to be appointed by the Crown, and not to exceed thirty-six in number. But though nominated in the first instance by the Crown, arrangements would be made to fill up a certain number of the vacancies afterwards, so that Convocation might have the election of six members of the Senate. The Government proposed, with regard to the Convocation, that it should consist of the graduates who had obtained their degrees in this University, or any one who might be transferred to or become graduates from the other University. The Government proposed that the Senate should elect the Vice-Chancellor, and also that the new University thus constituted should appoint examiners and conduct examinations for matriculation and degrees, and that it should confer degrees in all faculties except theology. They proposed that those degrees should be granted without regard to residence in any particular college, that the examinations for those degrees should be with regard to the standard of efficiency only, and that the degrees should be conferred on all who came up to the standard, and they proposed that there should not be any professors or lecturers connected with the University, thus following the example of the University of London. The Government are of opinion that steps should be taken for the dissolution of Queen's University, and that graduates of Queen's should become graduates of the new University, and those who were matriculated students of one should be so of the other, and possess all the same privileges and advantages in the new University as they did in Queen's.

FIVE years ago, when the late Lord Lawrence publicly presented the first Mortimer Scholarship Prize, Prof. Huxley made a speech which has proved prophetic. It was to the effect that the ladder of Board School education planted in the gutter might land such lads as Baker in the highest universities. That lad enjoyed his Mortimer Scholarship (worth 30*l.*) one year. He then obtained a scholarship in the City of London School. In four years more he obtains an open scholarship in Trinity College, Cambridge, at seventeen years of age. An immediate result of this success of the Elementary Education Act is that the Brewers' Company have since presented two scholarships to the London School Board.

It was stated in Parliament on Monday that a petition having been presented to the Queen in Council, praying Her Majesty to grant a charter for a new Northern University, to be called the Victoria University, Her Majesty had been advised to grant the petition.

SCIENTIFIC SERIALS

Annalen der Physik und Chemie, No. 5.—From experiments, here described, on magnetisation of steel during the hardening process, Herr Holtz concludes that the method offers no advantages in practice. Magnets can, indeed, be thus made six times

as strong as by the ordinary method, but this holds good only for extremely weak magnetising force; as you increase the force the difference rapidly decreases, and ere long becomes in favour of the ordinary method.—Herr Schellbach and Herr Boehn describe some instructive effects got on plates covered with carbon-dust placed under a discharger of a Leyden jar. Various devices were introduced for reflection, &c., of the sound-waves, whose mechanical action is indicated by the resultant figures on the plates.—Herr Wroblewski finds that a tenfold increase of the viscosity of water (by dissolving a crystalloid or colloid in it) produces only a five or six-fold diminution of the value of the constant for diffusion of carbonic acid in pure water.—The lowering of tone undergone by a sounded tuning-fork when immersed in liquids having been attributed by Herr Auerbach to the circumstance that kinetic energy is dispersed in incompressible liquids in another way than in gases (the changes of state in liquids being supposed to occur isothermally, in gases isentropically), Herr Kolacek offers another explanation based on mechanical principles.—In an inaugural dissertation Herr Freund writes on some galvanic properties of aqueous metal-salt solutions, his experiments having been made by Paalzow's method; and the results for sulphate of copper solution differing about 5 per cent. from those formerly obtained by Herr Beetz, he offers an explanation of this; which, however, Herr Beetz rejects, adhering to his own numbers.—Herr Kettler contributes a paper on the theory of double refraction, and Herr Rammsberg writes on some topics in mineralogical chemistry.

Morphologisches Jahrbuch, vol. 5, part 1.—This number contains no fewer than thirteen lithographic plates. Three of these illustrate Oscar Hertwig's second part of his memoir on the piscine dermal skeleton. He deals now with the ganoids (Lepidosteus and Polypterus).—R. S. Bergh, on the early development of the ovum of *Gonothyrax loveni* (Allman), 2 plates, 40 pages.—G. Born, the nasal cavities and passages of the amniotic vertebrata (3 plates, and about 80 pages).—O. Kling on *Craterolophus tethys*, a contribution to the anatomy and histology of the Lucernaridæ (3 plates, 26 pages).—A. Rauber, on the occurrence of budding among the vertebr. a (2 plates).

Zeitschrift für wissenschaftliche Zoologie, vol. 32, part 2.—J. E. Boas, the teeth of the Saroids (25 pages).—R. Wiedersheim, the anatomy of *Amblystoma weismanni*, with two large coloured plates.—R. Greef, the pelagic annelids of the Canary Islands (45 pages, 3 plates); with discussions on the comparative anatomy of the Tomopteridæ, and figures and descriptions of *Pontodora*, &c., and several new species of Tomopteris.—H. Simroth, on the locomotion of *Limax*; two plates figuring *L. cinerconiger*.—J. Ciamician, on the histology and embryology of *Tubularia mesembryanthemum* (25 pages, 2 plates).

Kosmos, vol. 3, part 1, April, 1879.—The first article, "Natural Science in the Middle Ages," by Fritz Schultze, refers especially to Roger Bacon.—The controversy about *Planorbis multiformis* (1st art.), by F. Hilgendorf, is, among other figures, illustrated by a series of outlines of the different varieties of *P. multiformis*, as seen in section, &c., and referring to Sandberger's views.—Hermann Müller contributes an article of 16 pages, on Samuel Butler's "Life and Habit."

Reale Istituto Lombardo di Scienze e Lettere, Rendiconti, vol. xii. fasc. x.—We note here the following:—Researches on the electric conductivity of carbon (continued), by Prof. Ferrini.—On a surface of capillarity, by Dr. Poloni.—Influence of climate and soil on the combustibility of tobaccos, by S. Cantoni.

Journal de Physique, June.—Spectroscope for observation of ultra-violet radiations, by M. Cornu.—Spectrometric measurement of high temperatures, by M. Crova.—Magnetic rotatory power of gases, by M. H. Becquerel.—Magnetic rotatory power of liquids and their vapours, by M. Bichat.

SOCIETIES AND ACADEMIES

LONDON

Royal Society, June 19.—"Researches in Chemical Equivalence. Part III.—Nickelous and Cobaltous Sulphates." By Edmund J. Mills, D.Sc., F.R.S., and J. J. Smith.

Although the chemistry of nickel and cobalt is interesting from many points of view, it is more especially attractive from the probable isomerism of these metals. Their combining proportions, in fact, according to the most valuable evidence we possess, appear to be entirely the same. The authors, therefore,