

the week of the Congress, to which geologists are invited to send maps, recent memoirs, rocks, fossils, &c. Foreign members of the Congress are invited by the Council of the British Association to attend the meeting of that Association at Bath. During the week when the Association meets, there will be short excursions in the neighbourhood of Bath, and longer excursions will be made after the meeting. At these excursions excellent sections of the Lower Secondary and Upper Palæozoic rocks will be visited. Excursions will take place in the week after the meeting of the Congress (September 24 to 30). The number of these will depend upon the number of members desirous of attending, and upon the districts which they most wish to visit. The excursions at present suggested are:—(1) The Isle of Wight (visiting the Ordnance Survey Office at Southampton on the way)—Cretaceous, Eocene, Oligocene. (2) North Wales—Pre-Cambrian and the older Palæozoic rocks; West Yorkshire (Ingleborough, &c.)—Silurian and Carboniferous Limestone. (3) East Yorkshire (Scarborough, Whitby, &c.)—Jurassic and Cretaceous. Should the number of members be so large as to make additional excursions necessary, they will probably be:—(4) Norfolk and Suffolk—Pliocene (Crag) and Glacial beds. (5) To the Jurassic rocks of Central England. The short excursions during the week of the Congress will probably be to Windsor and Eton, to St. Albans, to Watford, to Brighton, to the Royal Gardens at Kew, and to other places of interest. Brief descriptions of the districts to be visited in these excursions will be prepared (with illustrative sections, &c.), and will, if possible, be sent to members before the meeting. The full Report of the London meeting will be issued soon after the close of the session. It will contain, in addition to reports of the ordinary business of the Congress, the Report of the American Committee on Nomenclature (about 230 pp.); the Memoirs on the Crystalline Schists (about 150 pp.), and reports of discussion on the same; and probably a reprint, with additions, of the Report of the English Committee on Nomenclature (about 150 pp.).

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

OXFORD.—The Burdett-Coutts Scholarship in Geology has been awarded to Mr. M. Hunter, B.A., Queen's College.

The degree of M.A. *honoris causâ* has been conferred on Dr. S. J. Hickson, the Deputy Linacre Professor, and on Mr. Wyndham R. Dunstan.

Scholarships in Natural Science are announced for competition, at Merton and Corpus jointly on June 26, at Magdalen on October 9, and at Balliol, Christ Church, and Trinity jointly on November 20. Information may be had from the science tutors of the various Colleges.

A statute is being discussed by Congregation, which will place the biological sciences on the same footing as the physical sciences so far as the examinations for pass degrees are concerned, and it is hoped that the changes to be introduced will increase the numbers of the biological and medical schools.

Mr. F. J. Smith, of the Millard Laboratory at Trinity, has been appointed University Lecturer in Mechanics and Experimental Physics.

CAMBRIDGE.—An amended report on the Natural Science Examinations has just appeared, but the scheme proposed is very complex. It having been found difficult to get examiners to undertake the honours, and ordinary degree, and M.B. examinations combined, it is proposed to separate the elementary examination work, and appoint two examiners each in elementary chemistry, in elementary physics, and in elementary biology, while two examiners in each subject of the Natural Sciences Tripos are to be appointed as before, and two in pharmaceutical chemistry, for the second M.B. Thus there will be twenty-four examiners in all. The examiners are to be paid a minimum of fifteen, twenty, or thirty pounds each, with a payment of five shillings for each Tripos candidate in their subject, or one, two, and four shillings per candidate in other examinations. Moreover, it is required that all papers and all practical work in honours shall be examined by both examiners in a subject. Both examiners are to be present at all oral work in their subject; and all examiners must be present at the meeting for arranging the class-list for any examination. We prognosticate that the list of examiners, if at all worthy of the University, will not largely consist of non-residents, under the new scheme. The

worst mistake perhaps that the University makes is in continuing the one-sided ordinary degree examinations in single subjects, such as geology, botany, and zoology; for all combine. There were only four candidates in the last academic year; and for these there were six separate examinations provided, though two were not held. The chemistry "special" attracts a number of candidates, who might be much better employed in preparing for the First Part of the Natural Sciences Tripos. It would be far easier to work the Natural Science Examinations if these were abolished. It is absurd to keep up a machinery of examination which is tabooed even by candidates. The Tripos is a success, which the specials are not, and still more liberal payments and regulations ought to be made. It ought to be remembered that the graduates pay heavy degree fees in addition to examination fees.

The examiners for 1888 in the Second Part of the Mathematical Tripos were Edward John Routh, Sc.D., Peterhouse; James Whitbread Lee Glaisher, Sc.D., Trinity College; Joseph John Thomson, M.A., Trinity College; Andrew Russell Forsyth, M.A., Trinity College. The names, in each class and in each division, are arranged in alphabetical order, and not in order of merit. All the candidates passed the Mathematical Tripos, Part I., in June 1887.

Class I.—Division 1.—Baker, B.A., Joh.; Berry, B.A., Trin.; Flux, B.A., Joh.; Mitchell, B.A., Trin. Division 2.—Brown, B.A., Christ's; Clay, B.A., Trin.; Iles, B.A., Trin.

Class II.—Little, B.A., Trin.; Norris, B.A., Joh.; Peace, B.A., Emman.; Soper, B.A., Trin.

Class III.—None.

The faint hope that there was till lately that a Geological Museum might soon be begun has been dissipated by the Financial Board having reported that the University has no funds available at present, although the Sedgwick Fund has £19,000 in hand to supplement the University contribution.

The late Sir Charles Bunbury's valuable herbaria have been presented to the University by Lady Bunbury.

At the Annual Scholarship Election at St. John's College, on June 18, the following awards in Natural Science were made:—Foundation Scholarships continued or augmented—Seward, Rolleston, Rendle, Turpin, Groom, d'Albuquerque; Foundation Scholarships awarded—Hankin, Horton-Smith, Locke, Baily, Simpson; Exhibitions awarded—d'Albuquerque, Hankin, Horton-Smith, Blackman, Schmitz. In Mathematics, the following awards were made:—Foundation Scholarships continued or augmented—Baker, Flux, Norris, Orr, Sampson, Harris, Rudd, Bennett; Foundation Scholarships awarded—Palmer, Carlisle, Burstall, Monro, Cooke, Lawrenson; Exhibitions awarded—Sampson, Harris, Monro, Dobbs, Reeves, Bennett, Burstall, Cooke, Lawrenson, Brown, Finn, Kahn, Salisbury, Schmitz, Shawcross; Proper Sizarship awarded—Finn. Wright's Prizes to Simpson, Hankin, Blackman, for Science; and Orr, Burstall, Reeves, for Mathematics. The Herschel Prize to Salisbury, for Astronomy; the Hockin Prize for Electricity not awarded. The Hutchinson Studentship of £60 a year for two years is awarded to Mr. G. S. Turpin for research in Organic Chemistry; and the Hughes Prize to Orr (Senior Wrangler) and Brooks (Senior Classic).

SCIENTIFIC SERIALS.

American Journal of Science, June.—Note on earthquake-intensity in San Francisco, by Edward S. Holden. The object of this paper is to obtain an estimate of the absolute value of the earthquake-intensity developed at San Francisco during the American historic period, based on the very complete records collected by Thomas Tennant. The intensity of each separate shock (417 altogether) is assigned on the arbitrary scale of Rossi and Forel. The total average intensity during the 80 years from 1808 to 1888 is found to be nearly equal to the intensity of 28 separate shocks as severe as that of 1868, and the 417 shocks of known intensities correspond to 33,360 units of acceleration.—On the relations of the Laramie Group to earlier and later formations, by Charles A. White. The author's further studies of this group, by some geologists referred to the Tertiary, by others to the Cretaceous ages, lead to the conclusion that the upper strata form a gradual transition from the latter to the former, while there is strong presumptive evidence of the Cretaceous age of the greater part of it.—The gabbros and diorites of the "Cortlandt Series" on the Hudson River near Peekskill