

Africa, in which the absence of the mosquito is associated with a conspicuous absence of ague. It would, however, be premature to sweep aside by such observations those of many previous writers, according to whom infection with the malarial poison occurs both by way of the alimentary canal (through drinking water) and of the respiratory organs (through air). However this may be, whether malarial infection under natural conditions is carried out to a large extent by way of inoculation through mosquitoes; whether the mosquito serves merely as the instrument of infection; or whether it is—as is maintained by Laveran, and notably by Manson—the host of the malarial plasmodium; whether artificial immunity against malarial fever is procurable and by what means, are some of the questions which, having a principal bearing on prevention, ought to receive an immediate answer.

It is for reasons of this kind that Koch's great authority and weighty opinion are welcome; they ought to stimulate to action those Governments whose possessions in tropical and subtropical countries impose on them the responsibility of better protecting the health and life of their civil and military subjects, a responsibility which hitherto, unfortunately, does not seem to have weighed heavily on them. Our own Indian Government has with laudable spirit initiated important work by appointing for specific research on malaria an able young military surgeon, Surgeon-Major Dr. Ronald Ross. While this is a beginning, it is small as compared with what is needed to meet the case; what is wanted is a staff of specialists, whose systematic and concerted work is required to elucidate the many problems connected with the subject. The Colonial Office also, with its sway over vast malarial territories in tropical and subtropical Africa, might do a great deal in the matter, considering that the health and life of their numerous civil and military servants is exposed continually in some of the most notorious hotbeds of deadly fevers to dangers which ought to, and with advancing exact knowledge might be prevented.

E. KLEIN.

THE UNIVERSITY OF LONDON COMMISSION BILL.

THE second reading of the University of London Commission Bill last week, without a division, should make its passage into law this Session certain. After the elaborate pains taken by the leaders of the irreconcilable graduates to personally instruct members of Parliament during the week preceding the debate, the feeble nature of the actual opposition came as something of a surprise. It is dangerous to treat Parliament as if it were a body of graduates with a vote to cast at a senatorial election, and methods suitable for the one kind of campaign are likely to fail in the other, as Sir John Gorst made plain, when he referred to the misstatements of fact which are inseparable from a contested election. But the danger is by no means altogether overpast. Having failed to persuade Parliament to reject the Bill, Sir John Lubbock and his friends are now preparing to do their best to wreck it and to ensure its passage in a form which will effectually prevent the University from adding to its present usefulness or doing anything to encourage learning and research. The member for the University has placed his name to two amendments, each of them, if accepted, calculated to stultify the labours of half a generation for the advancement of higher education in the metropolis. To begin with he proposes to abolish the thirty-mile limit, which is necessary if the reconstituted University is to be a seat of learning for London as well as of London. The effect of this would be to encourage those provincial Colleges at present unconnected with any University to apply for

incorporation with London, to delay indefinitely the formation of a University for the Midlands—a foundation much to be desired, and to render impracticable the working of the Boards of Studies of the new University in London—a provision upon which a large part of its efficiency will depend. It would be difficult to imagine any single amendment which could reach further in its evil consequences, or be more destructive of the whole purpose of the Bill than this.

But Sir John is not content with making any unity of policy unattainable; he is anxious to ensure that as large a proportion as possible of the University scholarships and exhibitions shall help to maintain the students of other seats of learning. It has long been one of the anomalies of the present University that a large number of the scholarships are won by men and women who are studying elsewhere than in London, and very frequently at other Universities. Especially is this the case with mathematics, the rewards for which study are almost invariably taken by Cambridge men. In order to maintain and extend this condition of things, the member for the University proposes that external students shall be admitted to the examinations for internal students. Under the dual examination system which the Senate will have the power of establishing, by the terms of the Bill, should it seem advisable to do so, internal students will be admitted to the examinations for external students; and rightly, for these tests, like the present ones, will be open to all the world, irrespective of the manner or place of study. But this is no argument for reciprocity in regard to the internal examinations. Should an internal student win an external scholarship, the University funds will at least go to the encouragement of learning in London itself; but should an external student take an internal scholarship, the University chest will, in the large majority of instances, be depleted for the benefit of some other institution. And what is even more objectionable, this amendment would divest the internal degree of its chief value in the eyes of students and the public alike, the guarantee namely which it will give under the Bill as it stands, that its holders have undergone a definite course of training and study. This guarantee is far more valuable in the eyes of those who understand educational matters than the difficulty of the questions which a candidate may succeed in answering during a few days at the close of his studentship, under conditions which at best admit a large measure of chance.

It is hard to believe that the Colleges will consent to take a part in reconstitution on these lines, or that Parliament will play into the hands of the wreckers by accepting such amendments. The proposal to bind the hands of the Senate and force them willy-nilly to subject external and internal students to the same examination—a point to which so much attention was directed in the recent debate—is not worth serious argument; for apart from its inherent impracticability, the facultative dual examination was the basis of the compromise on which the present Bill rests, and to destroy this would be to render legislation ineffectual because unacceptable to all the teaching bodies interested.

THE SCIENCE AND ART BUILDINGS AT SOUTH KENSINGTON.

WE were able to print last week the text of the Memorial forwarded to the Government by the President of the Royal Academy, pointing out how disastrous it would be for the future of Art in this country if the new proposals regarding the buildings at South Kensington were carried out. As our readers will remember, the same course had already been taken by the President of the Royal Society with regard to the Science side of the question.

We are now enabled to give the names of those who have signed the Art Memorial.

Edward J. Poynter, P.R.A.	Cyrus Johnson.
W. B. Richmond, R.A.	Frank Walton.
Fredk. Goodall, R.A.	Ernest A. Waterlow, P.R.W.S.
G. W. H. Boughton, R.A.	Walter C. Horsley.
Walter W. Oules, R.A.	Charles Fowler.
Ernest Crofts, R.A.	J. D. Crace.
Thos. G. Jackson, R.A.	Edwin Bale, R.I.
Hamo Thornycroft, R.A.	M. R. Corbet.
H. H. Armstead, R.A.	Edith Corbet.
Harry Bates, A.R.A.	W. J. Hennessy.
Alfred Gilbert, R.A.	H. R. Mileham.
Briton Riviere, R.A.	James E. Grace.
E. Onslow Ford, R.A.	Harold Rathbone.
William Holt, of Oldham.	H. R. Hope-Pinker.
John M. Jones.	H. Cecil Drane.
W. P. Frith, R.A.	G. E. Wade.
Frank Dicksee, R.A.	Lionel Cust.
Phil. R. Morris, A.R.A.	Walter McLaren.
George Frampton, A.R.A.	Alfred Drury.
Hugh de T. Glazebrook.	Fanny W. Currey.
Luke Fildes, R.A.	W. Hounsom Byles.
Val Prinsep, R.A.	L. Fairfax Muckley.
Marcus Stone, R.A.	R. Falconer MacDonald.
Colin Hunter, A.R.A.	Elinor Hallé.
G. F. Watts, R.A.	J. Fitz Marshall, R.B.A.
John R. Clayton.	May E. Gordon.
Reginald Barratt.	A. T. Yowell.
Fredk. Smallfield.	Mary Grace.
Lewis F. Day.	Henry T. Wells.
Thos. J. Grylls.	J. Calcott Horsley.
Morant and Co.	William F. Yeames.
L. Alma Tadema, R.A.	Seymour Lucas.
Andrew C. Gow, R.A.	Eyre Crowe, A.R.A.
Sydney P. Hall.	G. D. Leslie.
Alfred East.	Thos. Brock.
John Charlton.	W. Holman Hunt.
Oliver Murray, A.R.A.	Edward Burne-Jones.
C. E. Johnson.	Arthur Severn.
J. Y. Hunter.	C. E. Hallé.
R. Phene Spiers, F.S.A.	Thos. Stirling Lee.
Gordon Thomson.	Gleeson White.
John Tenniel.	Walter Crane.
Edmd. M. Wimperis.	Carlisle.
Herbert Schmalz.	W. Q. Orchardson, R.A.
S. Melton Fisher.	

NOTES.

In the presence of a brilliant and representative gathering of citizens, the freedom of the City of Edinburgh was conferred upon Lord Lister on Wednesday, June 15.

GERMANY owes most of her success in the commercial and industrial world to her readiness to act upon the advice of her men of science. The German Emperor has just given further evidence that he understands the value of scientific opinion in matters affecting national welfare, and recognises the importance of technical education, by nominating Prof. Slaby, of the Technical College at Charlottenburg, Prof. Launhardt, of the Technical College at Hanover, and Prof. Intze, of the Technical College at Aachen, to be life members of the Upper House of the Prussian Diet. The *Times* correspondent at Berlin states that while Prof. Slaby was delivering his lecture at Charlottenburg on Wednesday, he was interrupted by the receipt of a telegram from the Emperor, which he proceeded to read to his class. It was in the following terms:—"In recognition of the importance which technical knowledge has acquired at the end of our century, and in profound respect for the exact sciences in general, I wish to confer upon the Technical College of Charlottenburg a seat and a vote in the Herrenhaus, and I nominate you as the most fit person to be its representative.—William, I.R." Prof. Slaby, addressing the students, expressed his sense of the significance of the step which the Emperor had

taken in conferring upon the technical colleges the right of representation in the Upper House of the Prussian Diet, a privilege which the Universities had long enjoyed.

THE preliminary programmes of the sections of the American Association for the Advancement of Science are beginning to be published. Section A (Mathematics and Astronomy) announces twenty-five papers, and reports of five committees. Section C (Chemistry) announces that on Tuesday, August 23, under the auspices of the American Chemical Society, the morning session will be devoted to the subject of analytical chemistry, led by Dr. P. De P. Ricketts, of Columbia University; the afternoon to teaching of chemistry, Dr. F. P. Venable, University of North Carolina. On Wednesday, August 24, the Association will make an excursion to Salem as guests of the Essex Institute. On Thursday, August 25, the morning will be given to inorganic chemistry, led by Dr. H. L. Wells, Yale University; the afternoon to organic chemistry, Dr. Ira Remsen, Johns Hopkins University; and the evening to physical chemistry, Dr. T. W. Richards, Harvard University. On Friday, August 26 (Harvard Day), in one of the Harvard University rooms, the subject of physiological Chemistry will be opened by Dr. E. E. Smith, New York; President Eliot will deliver an address to the Association at large in the evening. On Saturday, August 27, the morning will be given to agricultural chemistry, led by Dr. H. A. Weber, Ohio University; and the afternoon to technical chemistry, Dr. N. W. Lord, Ohio University.

THE issue of the *Revue Scientifique* of June 11 contains an interesting critical notice of the Royal Society's International Catalogue scheme by M. Charles Richet, a well-known expert in such matters. M. Richet fears that the apathy which the public manifest towards all such enterprises may make it difficult to obtain the necessary funds from subscriptions. He cordially welcomes the proposal to issue the catalogue in two forms—as slips and in book form—but regards the preparation of slips of the character suggested as a work of great difficulty on account of its magnitude. Being an ardent advocate of the Dewey system, he naturally deplors the fact that it has been put aside; but yet finally expresses his conviction that all advocates of the system will rally, without hesitation, to the system proposed by the Royal Society, which, being advocated by such a body, has the greatest chance of success. Of the scheme as a whole, M. Richet writes: "C'est une belle œuvre à accomplir: et le plan est excellent, dans son ensemble. Nous espérons donc fermement que tous les savants de France et de l'étranger prêteront leurs concours actifs à cette magnifique publication." If all receive the proposals in the same generous spirit of appreciation and self-abnegation, there can be little doubt of the success of the enterprise.

PROF. O. C. Marsh, Yale University, New Haven, has been elected a Foreign Member of the Geological Society.

PROF. B. GRASSI, M. Hippolyte Lucas, and Dr. August Weismann have been elected honorary members of the Entomological Society of London.

THE death is announced, at the age of seventy-two, of Sir James Nicholas Douglass, F.R.S., late Engineer-in-Chief to the Hon. Corporation of Trinity House. During his tenure of this post he carried out many important engineering works both at home and abroad, such as the Wolf, Longships, Great and Little Basses, Eddystone, and Muricoy lighthouses, and he effected numerous technical improvements connected with light-houses and their illuminating apparatus, as well as in buoys and beacons. He was elected a Fellow of the Royal Society in 1883, and retired from his post at the Trinity House in 1892.