

*Annuaire des Mathématiciens*, 1901–1902 ; publié sous la direction de MM. C.-A. LAISANT, AD. BUHL. Paris, C. Naud, 1901. 8vo. xxiv + 469 pp.

THE idea of publishing an annual list of those interested in mathematics was brought forward with much earnestness by Professor F. Rudio at the first international congress of mathematicians at Zurich in 1897. The matter was not taken up, however, until two years later, when M. Laisant, recognizing the favorable opportunity afforded by the international congress to be held at Paris, presented the proposition to M. Naud, the publisher. The plan contemplated an alphabetic list of living mathematicians, with their leading titles, the mathematical societies to which they belong, and their addresses. For the purposes of the compilation a mathematician was defined as a person belonging to one of the following groups : (1) Members of mathematical societies, or of mathematical sections of general scientific societies ; (2) authors of mathematical works of an original nature ; (3) those who teach mathematics as their special department of work. As a result of the labors of the compilers, more than six thousand names appear in the register.

The work also contains lists of mathematical societies, of associations having mathematical sections, and of the journals devoted to this science. A brief necrology of mathematicians, covering the years 1900 and 1901, is made the more valuable by an added biography of Hermite. Unfortunately all dates are omitted in the necrology, a fault which will probably be remedied in future editions. The work closes with a half dozen "notices scientifiques," mostly foreign to the subject in hand :—By Paul Appell : "Sur le principe de la moindre contrainte de Gauss" :—By J. Petersen : "Les 36 officiers" :—By A. G. Greenhill : "Les fonctions elliptiques au point de vue de leurs applications." :—By Ch. Méray : "La langue internationale auxiliaire *Espéranto* et la littérature scientifique." :—By P. H. Schoute : "Le nombre des points, des droites, des plans, etc., contenus dans un hyperespace linéaire." :—By P. H. Schoute : "La *Revue semestrielle des publications mathématiques*."

The general plan of the work is very commendable. Such a publication puts scientific workers more closely in touch with one another, and makes the mathematical world seem more real. It places at the student's hand a mass of information

that it has heretofore been exceedingly difficult to reach, information especially welcome to those having editorial duties to perform.

Unfortunately, however, the list has been so hastily compiled as to admit a number of errors that are, to say the least, unfortunate. Were it not that this is the initial number, that new ground is being broken, and that the task of condensing several thousand replies was so great, reviewers would be justified in seriously criticising the whole work. As it is, they will doubtless rest content with pointing out certain lines for improvement, hoping, as they are probably justified in doing, that the second number will remedy the defects of the first.

To justify the intimation of inaccuracy a few types of the errors contained in the work may be mentioned. From the list it appears that Lord Kelvin lives in Glasgow, England; that there is a Brogham Young College in Utah, and a Harvard University at Cambridge; that Professor Byerly's middle name is Elwood, and that the well-known Münster mathematician is Professor Killing. Several prominent names are omitted entirely, including W. S. Burnside, W. W. R. Ball, A. W. Panton, and E. M. Langley, while, as if to atone for this neglect, the name of Professor P. F. Smith appears twice on the same page, and that of the late Professor Craig appears both in the list of living mathematicians and in the necrology. The names of the American states are frequently omitted, and occasionally the state is given without the city. In the list of imperfections should also be mentioned the omission of the initials of a large number of French mathematicians, a national habit but an international annoyance.

It does not seem too much to hope that the second volume will be critically revised by a good linguist, that an effort will be made to enlarge the list judiciously, that the necrology will contain the dates of birth and death, that the list of periodicals will be made more nearly complete, that the notes will be submitted for correction to the various persons concerned, and that the extraneous matter will give place to topics more germane to the subject in hand.

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