Jones led in a discussion of the subject, 'The Training of Chemists,' reviewing a recent paper by Sir William Ramsay.

Dr. P. W. Rowland followed with a statement of his views on the treatment of the opium habit. According to his theory something is manufactured in the fluids of the body of an opium eater which acts as an antitoxin—something positive is developed which counteracts or antagonizes the morphine. These opposing forces approximate a condition of equilibrium, thus enabling the victim to take ever-increasing doses. This partial equilibrium is lost when the morphine is withheld. It was considered possible to produce an antitoxin, and it was suggested that the club undertake an investigation to this end. Dr. Rowland thought that some lower animal, say the horse, could be rendered immune to poisonous doses of opium or morphia by repeated injections of the substance, and that the serum thus obtained would probably contain the antitoxin in the case of the habitué of morphine or opium.

The next meeting of the club was held December 2. Dr. J. B. Bullitt, the leader for the evening, after some introductory remarks on immunity to drug influences, addressed himself more particularly to the closely allied subject 'Immunity from Disease.' Attention was called to the fact that the lower animals are immune to certain diseases to which the human race is subject, and *vice versa*. It was also noted that some divisions of the race enjoy immunity where others show peculiar susceptibility. Natural and artificial immunity were discussed. The history of the various theories of immunity, with a brief statement of each, was given, and special emphasis was laid on the 'side-chain' theory.

Alfred Hume,
Secretary.

DISCUSSION AND CORRESPONDENCE.

AN EXAMPLE IN NOMENCLATURE.

Mr. David White has published in the 'Smithsonian Miscellaneous Collections' (Quarterly Issue), Vol. XLVII., Pt. III., pp. 322–331, pl. xlvii, xlviii, a paper on 'The Seeds of Aneimites.' He shows that he has specimens of the foliage of that genus with seeds attached, also an abundance of detached seeds. He names the species bearing these seeds *Aneimites fertilis* n. sp. But he says that he discovered the seeds before he could be certain that they belonged to *Aneimites,* and had contemplated giving them the name *Wardia,* that he had even gone so far as to give them that name in a manuscript in preparation, but that he had postponed publication 'in the hope that further study * * * would yield * * * evidence bearing either on the internal organization of the fruits or on the structure of the fronds.' Such evidence he subsequently found and established to his satisfaction that the 'fruits' belong to the genus *Aneimites,* a supposed fossil fern, thus adding one more to the rapidly growing list of Paleozoic seed plants.

On page 323, where the species is described, he calls it "*Aneimites* (*Wardia*) *fertilis* n. sp., but in other places *Aneimites fertilis.* He, however, constantly refers to the seeds as *Wardia,* and in at least one place (p. 329) he calls them *Wardia fertilis.* He does not pretend that they belong to a different genus from *Aneimites fertilis,* and, indeed, proves that they are the same, and the specific name is the same for both combinations. What he has done is to take a name from an unpublished manuscript of his own and publish it for the first time as an exact synonym of the name that he gives to the species. The name *Wardia fertilis* is, therefore, stillborn, or at least strangled at its birth, and has no validity whatever.

Now why should he thus cumber an overburdened literature with another worthless synonym? Such a proceeding in the present state of science is a recognized crime. As Mr. Bather said in discussing a similar case some time ago, what does the scientific world care for his private excogitations over material too imperfect for publication?

But the name *Wardia* was preoccupied anyhow, for that name was given by Harvey and Hooker in 1836 to a genus of

mosses from the Cape of Good Hope,* dedicated to N. B. Ward, Esq. The genus and one species, *W. hygrometrica,* were fully described and figured. If it be said in extenuation that the work in which it occurs is somewhat difficult of access, this can not be said of Endlicher's 'Genera Plantarum,' which is in all libraries, and where (p. 1345) the genus is redescribed and is duly entered in the index. The author of this two-fold achievement is a member of the Committee on Botanical Nomenclature! LESTER F. WARD.

DELUC'S 'GEOLOGICAL LETTERS.'

TO THE EDITOR OF SCIENCE: With all due respect for the opinions of Dr. Emmons and Sir Archibald Geikie, I am unable to see why von Zittel was not scrupulously exact in his handling of facts when crediting Deluc with prior use of the term 'geology' as compared with de Saussure. The latter uses it but twice, defining it as 'la Théorie de la Terre,' in the earliest edition of his work, published in 1779. The second authorized edition of Deluc's 'Letters' (it had already been pirated) appeared also in 1779, the term 'geology' occurring in the body of the work an equal number of times (vol. I., pp. 4, 5), and again in a footnote on p. 7, where it is observed that the word 'cosmology' is more generally used in an equivalent sense.

It is worth noting that this footnote, which purports to be of identical† tenor with the first edition, scarcely justifies the assertion that Deluc 'could not venture to adopt the term geology because it was not a word in use.' More to the point is a passage where the author expressly designates the work in hand as a *treatise on geology:* 'Je vis que je faisois un Traité, et non une esquisse de Géologie.' He constantly refers to it later under the abbreviated title of 'Lettres Géologiques,'* and intitulated another of his productions 'Traité élémentaire Géologie.' It appears, therefore, that beginning with 1778, a year before de Saussure's work saw the light, and continuously thereafter, Deluc employed the term geology in its modern sense; hence he is entitled to generous consideration for having helped bring the name our science now bears into familiar use. Deluc, in pointing out the etymological propriety of 'geology' no doubt furnished a suggestion which de Saussure immediately caught at, since he twice employs the term, as Dr. Emmons has said, 'without any explanation or apology,' and alludes also to 'the geologist,' as is natural. Von Zittel seems to me to have exercised very candid judgment in this matter, and one must be a very 'strict constructionist' indeed who can deny Deluc's claims to priority.

Almost simultaneously with the authors just considered, the celebrated Werner appears to have been instrumental, to some extent, in popularizing the term geology. Werner's definition of this and cognate words is given by one of his distinguished pupils, d'Aubuisson, from whose 'Traité de Géognosie' we extract the following (vol. I., p. 2): "Werner remarque, en outre, que les noms composés de *logos,* tels que zoologie, minéralogie, etc., désignent l'universitalité de nos connaissances sur un objet; et, d'après cela, la géologie comprend, selon lui, non seulement la géognosie, mais encore la géographie, l'hydrographie, la géogenie, etc."

C. R. EASTMAN.

December 29, 1904.

UNIVERSITY REGISTRATION STATISTICS.

TO THE EDITOR OF SCIENCE: On reading the article 'University Registration Statistics' (SCIENCE, N. S., Vol. XX., No. 552, December 30, 1904), it occurred to me that it would be interesting to know the average number of students to each teacher, in the institutions mentioned. The 'Total Registration' (not including the 'Summer Sessions'), divided by

* 'Wardia: a New Genus of Mosses, discovered in Southern Africa,' by W. H. Harvey and W. J. Hooker; *Companion to the Botanical Magazine,* Vol. II., London, 1836, pp. 183–184, pl. xxv.

† The text reads as follows in the 1779 edition: "Je répète ici, ce que j'avois dit dans ma première *Preface,* sur la substitution du mot *Cosmologie* à celui de *Géologie:* * * * c'est que l'usage ordinaire a consacré le premier de ces mots, dans le sens où je l'emploie."

* Compare, for instance, his frequent correspondence in the *Journal de Physique.*