Nathorst. Professor Geheimrath H. Rosenbusch could not be present to receive his degree.

Over 470 cards of identification were issued by the Society to Fellows, delegates, and guests attending the Centenary. Sixteen Foreign Members and 14 Foreign Correspondents, besides many other foreign and Colonial visitors, were present. The following were the countries represented: Austria-Hungary, Argentine Confederation, Belgium, Denmark, Egypt, France, German Empire, Greece, Holland, Italy, Japan, Mexico, Norway, Portugal, Russia, Sweden, Switzerland, United States, also the Dominion of Canada, India, South Africa, the Commonwealth of Australia, and the Dominion of New Zealand.

CORRESPONDENCE.

NOMENCLATURE OF AUSTRALIAN SILURIAN OPHIURIDS.

SIR,—Presumably this heading to Mr. Chapman's welcome letter (GEOL. MAG., Oct. 1907, p. 479) does not imply that Silurian Ophiurids are to be excepted from the laws of nomenclature when they occur at the Antipodes. Yet the difference between us could scarcely have arisen had Mr. Chapman felt himself bound by certain rules adopted at all recent sessions of the International Congress of Zoologists. But he is not even loyal to the Stricklandian code, preferring rather to follow 'an unwritten rule.' Perusal of the modern code, of which I believe Mr. Chapman has now received a copy, will, I hope, show him that my remarks concerning *Sturtzura* were in simple accordance with elementary rules. It is not my business to defend those rules, but since Mr. Chapman assumes that his own views are shared by others, I ask leave to put the real point in dispute as clearly as I can.

The object of selecting a type—whether type-specimen (holotype) of a species, or type-species (genotype) of a genus—is, not to indicate to one's readers what one believes to be the most characteristic form (norm) of the species or genus under discussion, but to fix on a form according to which the species or genus shall stand or fall. Experience has taught us that we all make mistakes in our descriptions, and that the most carefully constructed diagnosis may prove erroneous. A nomenclature based on diagnoses and on various rational or ethical principles has been tried and found wanting. Therefore zoologists have said: "We will exclude all these sources of human error from the foundations of our nomenclature so far as is possible, and we will base our work on concrete specimens."

Professor Gregory fixed on *Protaster brisingoides* as the genotype of *Sturtzura*. His interpretation may have been right or wrong, but this at any rate is sure: what *P. brisingoides* is, the same is *Sturtzura*; whatever the diagnosis may be, all species congeneric with *P. brisingoides* are also *Sturtzura*, unless they include the genotype of a prior genus. For example, if *P. brisingoides* be congeneric with *P. sedgwicki, Sturtzura yields to the prior Protaster; but if it be*

congeneric only with *P. leptosoma* as Gregory maintained, or only with *P. biforis* as I have hypothetically imagined, then the name ***Sturtzura*** stands. (Internat. Rules, 1905, Art. 29.)

That the rule referred to in the phrase "once a synonym, always a synonym" has no bearing on either of these suppositions, is evident when its meaning is understood. The rule, in fact, simply states that a generic name once used in zoological nomenclature cannot be used for any subsequent genus that does not include the original genotype, even when the name as first used has proved to be a synonym. But if the rule does not forbid the resuscitation of *Sturtzura* for a genus containing the genotype *S. brisingoides*, it certainly does forbid its use for a genus comprising only *S. leptosoma* and *S. leptosomoides*. (Internat. Rules, 1905, Art. 36.)

Mr. Chapman may not approve of these rules, and I do not pretend that I like them all myself. But in these matters of form it is surely better that individuals should come into line with the great majority of their colleagues.

My protest against the composition of certain names was not made from the standpoint of a museum curator, as Mr. Chapman seems to suppose, but from that of the compilers of the Stricklandian code, who desired to render "our scientific language palatable to the scholar and the man of taste." If a name is held to have no meaning, let it at least be euphonious; but if it is intended to have a meaning, that need not be a ridiculous one.

As for the more important matter—the homologies of the arm-ossicles, there seems no grave objection to the compromise now proposed by Mr. Chapman. But whether the ambulacrals consist of one piece as I suggested, or of two pieces as he now suggests, will probably not be decided until we find specimens with the stereom undissolved.

F. A. Bather.

London, 7 *October*, 1907.

COLLODION AS A PRESERVATIVE FOR FOSSILS.

Sir,—Dr. Bather's interesting article on collodion imprints reminds me of an intention I have long had of communicating to you another use for collodion. The usual method of preserving fragile fossils by application of a hot gelatine solution is one which I have always found troublesome and unsatisfactory. Some years ago a student suggested to me that a solution of collodion would penetrate more readily, could be used at ordinary temperatures, and would become solid more slowly. He gave me some solution that he was using for some other purpose—a saturated solution of gun-cotton in equal parts of amyl acetate and ethyl alcohol. I found this answer very well, both for preventing the flaking of delicate fossils and for mending broken ones. Small specimens can be simply immersed in the solution, left there (in a corked tube) for an indefinite period, and finally lifted out and dried. Larger ones may be painted over, several times if necessary. I have by this means mended, among other things, broken specimens from Wenlock Limestone and Chalk Marl,