him by Mr. F. W. Ramsden, H.M.'s Consul at St. Jago de Cuba. The well-known division of the hepatic lobes into minute lobules in *C. pilorides* from the same island was shown not to exist in *C. melanurus*, which otherwise closely resembled the former species, and this character could therefore no longer be considered a generic one. — P. L. Sclater, Secretary.

3. Linnean Society of London.

3th April 1884. — Mr. R. Morton Middleton showed a Jackdaw (*Corvus monedula*) with such albinism of the scapular and wing feathers as to give the bird a very considerable resemblance to a Magpie (*Pica caudata*). The Jackdaw had been watched for some time at Castle Eden, Durham, prior to its death from an injury. — Prof. P. M. Duncan gave a Revision of the Families and Genera of the Sclerodermic Zooantharia, the Rugosa excepted. He stated that there having been no systematic work written on the Madreporaria recent and fossil since that of M. M. Milne Edwards and Jules Haime 1857—60, and a great number of genera having been founded since that date there now arises a necessity for a fresh revision of the classification. This necessity is emphasized in consequence of the important morphological researches of Dana, L. Agassiz, Verrill and H. N. Moseley. The old sections of the Zooantharia suborder must be modified and added to. In the new revision the sections Aporosa and Perforata remain shorn of some genera, the old family Fungidae becomes a section with three families two of which are transitional between the sections just mentioned. The section Tabulata disappears, some genera being placed in the Aporosa and the others are relegated to the Hydrozoa according to Moseley. The Tubulosa cease to be Madreporarians. Hence the sections treated are Madreporaria-Aporosa, M.-Fungida and M. perforata. The nature of the hard and soft parts of these forms is considered in their relation to classification, and an appeal is made to naturalists to agree to the abolition of many genera, the author himself having sacrificed many of his own founding. The criticism of the 467 genera permits 336 to remain good, and as a moderate number (36) of subgenera are allowed to continue, the diminution is altogether about 100. The genera are grouped in alliances, and the plan seems to be useful. The number of alliances in a family differs. The object of the classification is to simplify, and many old artificial divisions are necessarily dispensed with. There is a great destruction of genera amongst the simple forms of Aporosa, and a most important addition is made to the Fungida. The genera *Siderastraea* and *Thamnastraea* are types of the family Plesiofungidae and *Microsolenia* and *Cyclolites* are types of the family *Plesioporitidae*. The family *Fungidae* and that of the *Lophoseridae* add many genera to the great Section *Fungida*. There is not much alteration in respect of the Madreporaria perforata, but the subfamily *Eupsamminae* are promoted to a family position as the *Eupsammidae*. — A paper was read of Mr. Francis J. Briant. On the Anatomy and Functions of the Tongue of the Bee (Worker). The author after referring to the structures of the more conspicuous parts of the endoskeleton and relations of the tongue thereto treats specially of the manner in which the Bee takes up the honey by its tongue. It appears that upon the nature and function of the organ in question authorities are by no means agreed. Kirby and Spence supported by Huxley and partly Newport, aver that the Bee Simply laps up its food; while Hermann Müller and others

rather attribute the action as due to the terminal whorl of hairs to which the honey adheres and therefrom is withdrawn inwards. The author of the paper on the other hand (from experiment and otherwise) is inclined to the view that the honey is drawn into the month through the inside of the tongue by means of a complicated pumping action of the organ itself aided by the closely contiguous parts. — J. Murie.

4. Linnean Society of New South Wales.

27th February, 1884. — 1. Monograph of the Australian Sponges. By R. von Lendenfeld, Ph. D. Part 1. This paper is introductory to a Monograph upon the Australian Sponges, large materials for which have already been accumulated by the author, partly from his own collections, and partly from those in the Museums of Christchurch and Dunedin, New Zealand, and of Adelaide, South Australia. The real investigation of this branch of the Coelenterata may be said to begin with the work of Grant, 1826; to have risen to a new and much higher level under Schulze, 1875—1881, and to have been continued by Sollas, Keller, Vosmaer, Marshall, the author, and others with continually increasing success up to the present time. A sufficient account of the Bibliography of the Spongida is presented in this paper to enable those interested to find any desired information upon the subject, a matter of no small difficulty at present. — 2. The *Scyphomedusae* of the Southern Hemisphere. By R. von Lendenfeld, Ph. D. Part 1. The *Scyphomedusae* or »Jelly-fish« appear to be more numerous in the Southern than in the Northern Hemisphere. Of the 210 known species, 104 have already been found in the former and as the animals of that Hemisphere are not nearly so well-known as those of the Northern, the number of Southern species must doubtless be much greater than that mentioned. Only 26 of the 104 Southern species are Australian, but this apparent poverty of the Medusae of our shores, is due to the limited investigation that has been made. In this paper all the species of this Hemisphere are described. — 3. Notices of some new Fishes by William Macleay, F.L.S., etc. Four species are here described. Two of them, *Platycephalus longispinis* and *Urolophus bucculentus* were taken in the Trawl in deep water outside the Heads of Port Jackson. The third, *Petroscirtes Wilsoni*, was found by Mr. J. D. Wilson, at the North Shore; and the fourth, *Athirinosoma Jamiesoni*, was a small fresh water fish from the Baemer, one of the head waters of the Brisbane River. — 4. On the improvement effected by the Australian climate, soil, and culture on the Merino sheep. By P. N. Trebeck, Esq. In this paper Mr. Trebeck traces the changes and improvement which wool has undergone in Australia since the first introduction of German and Silesian sheep. Samples of the wool of all the periods and flocks alluded to, were exhibited. Mr. Trebeck concludes his paper by stating his opinion, that the whole of the country on our western watershed was eminently suitable for the Merino sheep, and that we only required the fostering assistance of an intelligent Government to keep in the front ranks of the wool producing countries of the world. — The President exhibited several fine specimens of the »Paper Nautilus«, which had been brought from Lord Howe Island by Mr. H. T. Wilkinson, J. P. It is said that they are of rare occurrence at that Island.

Druck von Breitkopf & Härtel in Leipzig.