And he further observes that the variations in the position of the nervures, and in the magnitude of the cells, will also be found very useful in identifying the species.

February 5.

William Yarrell, Esq., V.P., in the Chair.

The Rev. George Capel, James Buckman, Esq., and Walter Tebbett, Esq., were elected Fellows.

Mr. Gould, F.L.S., exhibited specimens of the male and female of a new species of *Menura* from the Richmond River, New South Wales, and pointed out the distinctions between it and the original species. He named the new species *M. Alberti*, in grateful acknowledgement of the patronage which he had received from H.R.H. Prince Albert. He also exhibited a specimen of a new and remarkable Crustaceous animal from the same locality.

Dr. Wallich, V.P.L.S., communicated, by desire of Prof. von Martius, President of the Royal Bavarian Botanical Society of Regensburg, an official copy of an Address presented by that Society to Robert Brown, Esq., on his election to the Presidency of the Linnean Society.

Read the conclusion of Mr. Huxley's paper "On the Anatomy of *Diphyes*, and on the Unity of Composition of the *Diphyidæ* and *Physophoridæ*," &c.

Mr. Huxley, whose communication was written at sea, commences his memoir by a brief abstract of previous investigations of the family of *Diphyidæ*, chiefly derived from the works of Lesson and Will, in the absence of other books of reference. Of all the authors referred to, he observes, there is not one except Will, who has given any but a very superficial account of the family. So far even as the natatorial organs are concerned, it is but rarely that a description is sufficiently detailed and accurate not to fit two or three species with equal ease, while the minute internal organs have fared still worse. By all, the important fact of the gemmiparous generation of these

animals is overlooked; by all, except Will, the demonstration of the generative organs is omitted, and even he mentions with some doubt the male sac only; and lastly there is no attempt made by any of them to trace the various organs through their development, or to establish on the ground of anatomy the natural affinities of the group. To these latter points, Mr. Huxley states, that his attention has been chiefly directed during a voyage of some months through the South Atlantic and Indian Oceans, in the course of which he has examined several genera both of *Diphyidæ* and *Physophoridæ*, with as much care and attention as the inconveniences of ship-board would permit. The results are given under the following sectional divisions, viz.: 1. a description of the different species examined; 2. their anatomy; and 3. a comparison of *Diphyidæ* and *Physophoridæ*. Under the first head Mr. Huxley describes four species of *Diphyes*, one of *Calpe*, one of *Eudoxia*, one of *Aglaisma*?, and one of *Rosacea*. He then enters at length into the anatomy of the different parts of the body, under the several heads of the common tube; the natatorial organs and the duct connecting their cavities with the common tube; the nuclear piece or bract and its sacculus; and the polypoids, each consisting of a stomachal sac, a prehensile organ and a generative organ. Although generative sacs were found by the author in all the genera examined by him, it was only in *Eudoxia* and *Aglaisma* (?) that he procured unequivocal evidence, by the presence of ova, of their real nature. No unequivocal male organs were observed, although the so-called "entozoa" of Will were frequently seen swimming about in the cavity of the young generative organs. But they were not more abundant in these situations than in the stomachal sacs, common tube, &c., and their dissimilarity to true spermatozoa is too great for any conclusions to be founded on their presence. The total absence of male sacs, and the rarity of ova in the females, may, Mr. Huxley thinks, be accounted for by the season during which his investigations were carried on, the months of March, April, May and June being the winter of the Southern Hemisphere. Lastly, the author enters on the comparative anatomy of various species of *Physophoridæ*, by means of which he believes it to be satisfactorily demonstrated that there exists a unity of organization between the two families of *Diphyidæ* and *Physophoridæ*; and concludes by stating his opinion that *at least* two other families, the Hydriform and Sertularian Polypes, should be arranged with them in one natural group. The structural coincidences in these families he enumerates as follows: 1. body composed of two membranes, out of which the organs are modeled; 2. thread-cells universally (?) pre-

sent; 3. gemmiparous generation; 4. sexual generation, spermatozoa and ova being formed in vase-like external sacs.

The paper was accompanied with a series of illustrative drawings.

February 19.

William Yarrell, Esq., V.P., in the Chair.

The Rev. James Bedingfeld was elected a Fellow.

Read some Notices and Anecdotes of John Christian Daniel von Schreber, chiefly derived from the 'Erinnerungen aus meinen neunzig-jährigen Leben." By Dr. Ernst Wilhelm Martius. Communicated by Dr. Wallich, V.P.L.S. &c. &c.

Read also extracts from two Letters of the First President of the Society, Sir James Edward Smith, to J. Dryander, Esq., V.P.L.S., dated in 1792 and 1802. Communicated by the President.

March 5.

William Yarrell, Esq., V.P., in the Chair.

Dr. Wallich, V.P.L.S., read the following extract of a letter from Prof. Lehmann, dated Hamburgh, 14th December, 1849:—"I write to inform you that a work has just appeared, namely Proceedings of the Fifth Meeting of Scandinavian Naturalists held at Copenhagen 1847. Copenhagen, 1849. 8vo. There is in it a very remarkable paper by Liebmann, entitled 'A few words concerning the Impregnation of *Cycadeæ*,' p. 501 *seq.* It appears, according to this paper, that in that family ripe and vegetative fruits may be produced, without the process of impregnation. A female plant in the Botanic Garden at Copenhagen (males do not exist in Europe) produced seeds which have germinated! Liebmann made the same observation in Mexico."