September 28, 1841.

William Yarrell, Esq., Vice-President, in the Chair.

A letter from the Society's Corresponding Member, J. B. Harvey, Esq., dated South Australia, March 25, 1841, was read. This letter refers to some specimens which Mr. Harvey had forwarded on a former occasion as a present to the Society, and moreover states that he had, at the time of writing the letter, shipped another collection, part of which is also intended for the Society.

A letter from W. V. Guise, Esq., was next read. In this letter, which is dated Sept. 25, 1841, Mr. Guise calls the attention of the Members to the fact that a young Hoopoe (*Upupa Epops*, Auct.) was killed on the eighth of September, at Frampton-on-Severn, by the gamekeeper of Henry Clifford, Esq., of Frampton Court.

Mr. Lovell Reeve then submitted to the Meeting a *Tabula Methodica* of the plan he intended to adopt in his forthcoming CONCHOLOGIA SYSTEMATICA, for the arrangement of the Lepades and Conchiferous Mollusca. He stated, that in reviewing the history of Conchology, which may be dated from the time of Adanson and Linnæus, it was evident that few of these remarkable animals were then known; and although the classification proposed by the latter has been abandoned, from the fact of its having been based almost entirely upon the outward characters of the shells alone, without reference to the anatomy or habits of their animal inhabitants; it may be remembered as a most laudable attempt on the part of that great father of natural history, to introduce into his theory of nature a scientific arrangement of certain shells then before him, which he knew to be the production of certain once living animals. This fallacious method, therefore, was his alternative; he must have been well aware that he could no more arrive at the true history of the Mollusca by their shells alone, than at the natural history of Birds by their feathers alone; but, in the absence of the soft and living parts, he succeeded in establishing an arrangement, by noting such marks and symbols on the shell as could be supposed by analogy to indicate corresponding characters and developments in the organization of its animal. Since the time of Linnæus our intercourse with foreign lands and the general progress of civilization have given increased facilities of obtaining the animals in their native condition; thus, their anatomy and habits have become the popular subject of investigation, raising the study of Conchology to a level with the rest of the natural sciences. From the commencement of the present century various naturalists have assisted in reorganizing the arrangement and division of the Lepades and Mollusca; Bruguière, Lamarck, Cuvier, De Blainville, Deshayes and Gray have successively devoted

themselves to the subject. In illustration of the progress of Conchology, Mr. Reeve exhibited to the Society a series of written tables, showing the systems of classification and nomenclature pursued by these several authors. He observed, that the simple method of Lamarck was that usually adopted, but the last that had been introduced was that of Mr. Gray published in the British Museum Synopsis. The chief object of this author appeared to be to extend the application of the nomenclature, in which he enumerates more than three times the number of genera mentioned by Lamarck. He could not fail to appreciate many useful alterations in Mr. Gray's system of classification, and thought it was entitled to considerable merit on account of the attention with which he had studied the animals; he could not however but express his fears that many of Mr. Gray's changes were founded too much upon conjecture; it was also much to be regretted that the whole matter had not been presented to the notice of scientific men in a fair and satisfactory form. After a careful examination of these authors, and with the view of embodying much new and important matter from various scattered memoirs and monographs, Mr. Reeve proposes the foregoing system of arrangement, considering it only a matter of surprise, that whilst many eminent conchologists are indefatigable in describing new species, a revision in the general distribution of these animals has been so long neglected. The Lepades and Mollusca are to be considered as separate and distinct sub-kingdoms. The Lepades are divided into two orders, according to the established method, the sessile and pedunculated; and the Mollusca into five classes, upon the modifications of the organ of locomotion. The first class is divided, in imitation of Lamarck, according to the number and position of the adductor muscles, as indicated by the cicatrices or points of attachment on the internal surface of the shell. The second class includes but few species, and is distributed at once into families; the animals of this and the former class are all conchiferous, having a bivalve shell; the valves are connected by a ligament in the first class, but not in the second; their general organization too is essentially different. The third class, which comprehends by far the greater part of the Mollusca, is divided into seven orders, according to the varieties of the structure and position of the branchiæ, the system of respiration being the most important feature of distinction in the organization of these animals: this plan of subdividing them was proposed by Cuvier, and has been for the most part followed by subsequent naturalists. The animals of this class are not all conchiferous; some are naked, or entirely destitute of shell, and do not therefore come under the present notice. The fourth class contains but few genera; they include a singular kind of mollusk, having a small glass-like shell, found swimming in myriads on the surface of the ocean by means of a small wing-like natatory fin. The fifth and last class, which contains the Nautili, are divided into two orders, according to the plan of Lamarck. The following Table exhibits the primary distribution of these animals, with their subdivision into families; added to which is the entire classification in detail:—

Tabular Distribution of the Lepades and Conchiferous Mollusca.

Subregna.	*Classes.*	*Orders.*	*Families.*
LEPADES		Sessiles	Balanidæ.
		Pedunculatæ	Anatiferidæ.
MOLLUSCA CONCHIFERA.	Tropiopoda	Bimusculosa	Tubicola, Pholadaria.
			Solenacea, Myaria.
			Mactracea, Lithophaga.
			Nymphacea, Conchacea.
			Cardiacea, Arcacea.
			Trigonacea, Naiades.
			Chamacea.
		Unimusculosa	Tridacnacea, Mytilacea.
			Aviculacea, Pectinacea.
			Ostracea.
	Brachiopoda		Tendinosa, Adhærentia.
	Gasteropoda	Cirrhobranchiata	Dentalia.
		Cyclobranchiata	Phyllidiana.
		Cervicobranchiata	Fissuracea, Capulacea.
			Macrostomata, Tubispiracea.
		Pleurobranchiata	Bullacea, Semiphyllidiana.
			Aplysiana.
		Nucleobranchiata	Carinariana.
		Pulmobranchiata	Limacinea, Colimacea.
			Cyclostomacea, Auriculacea.
			Lymnæana.
		Pectinibranchiata	Melaniana, Peristomata.
			Neritacea, Ianthinea.
			Plicacea, Turbinacea.
			Parasitica, Canalifera.
			Alata, Purpurifera.
			Columellata, Convoluta.
	Pteropoda		Thecosomata.
	Cephalopoda	Polythalamia	Foraminifera, Siphonoidea.
		Monothalamia	Argonautidæ.

Classification in detail.

LEPADES.

Order 1. SESSILES.

Tubicinella. Conia.
Coronula. Balanus.
Elmineus. Clitea.
Catophragmus. Creusia.
Octomeris. Pyrgoma.

Order 2. PEDUNCULATÆ.

Lithotrya. Pollicipes.
Pentelasmis. Cinaris.
Scalpellum. Otion.

MOLLUSCA CONCHIFERA.

Class 1. TROPIOPODA.

Order 1. BIMUSCULOSA.

Family 1. *Tubicola.*

Aspergillum. Clavagella.
Fistulana. Teredo.
Gastrochæna.

Family 2. *Pholadaria.*

Xylophaga. Pholas.

Family 3. *Solenacea.*

Solen. Solemya.
Solecurtus. Solenella.
Panopæa. Glauconome.
Glycimeris. Pholadomya.

Family 4. *Myaria.*

Mya. Pandora.
Anatina. Anatinella.
Thracia. Myochama.
Corbula. Cleidothærus.

Family 5. *Mactracea.*

Lutraria. Gnathodon.
Mactra. Crassatella.

Mesodesma. Amphidesma.
Ungulina. Cumingia.

Family 6. *Lithophaga.*

Saxicava. Petricola.

Family 7. *Nymphacea.*

Sanguinolaria. Corbis.
Psammobia. Lucina.
Galeomma. Donax.
Tellina. Capsa.

Family 8. *Conchacea.*

Cyclas. Astarte.
Cyrena. Venus.
Galathæa. Cytherea.
Cyprina. Pullastra.

Family 9. *Cardiacea.*

Cardium. Cardita.
Isocardia. Cypricardia.

Family 10. *Arcacea.*

Cucullæa. Pectunculus.
Arca. Nucula.

Family 11. *Trigonacea.*

Trigonia.

Family 12. *Naiades.*

Unio. Iridina.
Hyria. Mycetopus.
Anodon.

Family 13. *Chamacea.*

Etheria. Chama.

Order 2. UNIMUSCULOSA.

Family 1. *Tridacnacea.*

Tridacna. Hippopus.

Family 2. *Mytilacea.*

Lithodomus. Mytilus.
Modiola. Pinna.

Family 3. *Aviculacea.*

Crenatula. Vulsella.
Perna. Avicula.
Malleus.

Family 4. *Pectinacea.*

Pedum. Plicatula.
Lima. Spondylus.
Pecten.

Family 5. *Ostracea.*

Ostræa. Placunanomia.
Placuna. Anomia.

Class 2. BRACHIOPODA.

Family 1. *Tendinosa.*

Lingula. Terebratula.

Family 2. *Adhærentia.*

Thecidium. Orbicula.
Crania.

Class 3. GASTEROPODA.

Order 1. CIRRHOBRANCHIATA.

Dentalium.

Order 2. CYCLOBRANCHIATA.

Chiton. Patella.
Chitonellus.

Order 3. CERVICOBRANCHIATA.

Family 1. *Fissuracea.*

Lottia. Emarginula.
Siphonaria. Fissurella.
Parmophorus.

Family 2. *Capulacea.*

Crepidula. Hipponyx.
Calyptræa. Pileopsis.

Family 3. *Macrostomata.*

Velutina. Stomatia.
Sigaretus. Haliotis.

Family 4. *Tubispiracea.*

Siliquaria. Vermetus.

Order 4. PLEUROBRANCHIATA.

Family 1. *Bullacea.*

Bulla.

Family 2. *Semiphyllidiana.*

Pleurobranchus. Umbrella.

Family 3. *Aplysiana.*

Aplysia. Dolabella.

Order 5. NUCLEOBRANCHIATA.

Carinaria.

Order 6. PULMOBRANCHIATA.

Family 1. *Limacinea.*

Parmacella. Testacellus.
Limax. Vitrina.

Family 2. *Colimacea.*

Helix. Bulimus.
Carocolla. Partula.
Anostoma. Achatina.
Pupa. Succinea.
Clausilia.

Family 3. *Cyclostomacea.*

Pupina. Cyclostoma.
Truncatella. Helicina.

Family 4. *Auriculacea.*

Auricula. Chilina.
Scarabus.

Family 5. *Lymnæana.*

Planorbis. Ancylus.
Lymnæa.

Order 7. PECTINIBRANCHIATA.

Family 1. *Melaniana.*

Melania. Melanopsis.

Family 2. *Peristomata.*

Valvata. Ampullaria.
Paludina.

Family 3. *Neritacea.*

Navicella. Neritopsis.
Neritina. Natica.
Nerita.

Family 4. *Ianthinea.*

Ianthina.

Family 5. *Plicacea.*

Tornatella. Pyramidella.

Family 6. *Turbinacea.*

Rissoa. Trochus.
Eulima. Turbo.
Scalaria. Margarita.
Delphinula. Littorina.
Solarium. Phasianella.
Phorus. Turritella.
Rotella.

Family 7. *Parasitica.*

Stylifer.

Family 8. *Canalifera.*

Cerithium. Pleurotoma.
Turbinellus. Pyrula.
Cancellaria. Murex.
Fasciolaria. Ranella.
Fusus. Triton.

Family 9. *Alata.*

Struthiolaria. Pterocera.
Rostellaria. Strombus.

Family 10. *Purpurifera.*

Cassidaria. Trichotropis.
Oniscia. Magilus.
Cassis. Leptoconchus.
Ricinula. Buccinum.
Columbella. Nassa.
Purpura. Planaxis.
Monoceros. Eburna.
Concholepas. Ancillaria.
Harpa. Oliva.
Dolium. Terebra.

Family 11. *Columellata.*

Volvaria. Voluta.
Marginella. Melo.
Mitra. Cymba.

Family 12. *Convoluta.*

Erato. Terebellum.
Cypræa. Conus.
Ovula.

Class 4. PTEROPODA.

Hyalæa. Vaginula.
Cleodora. Cuvieria.
Limacina. Cymbulia.
Creseis.

Class 5. CEPHALOPODA.

Order 1. POLYTHALAMIA.

Family 1. *Foraminifera.*

Orbiculina. Textularia.
Spiroloculina. Nodosaria.
Polystomella.

Family 2. *Siphonoidea.*

Spirula. Nautilus.

Order 2. MONOTHALAMIA.

Argonauta.

Mr. Gould exhibited two skulls of a large species of Kangaroo, from North Australia, which are remarkable for the large size of the nasal cavity, and differ likewise in some other parts of their structure from the more typical species of *Macropus*. Mr. Gould also laid before the Meeting some species of Fishes collected in North Australia.