THE new and revised edition of Griffith and Henfrey's "Micrographic Dictionary" is advancing rapidly towards completion, three numbers having been published during the last three months, bringing the work down as far as "Skin;" and it is announced that the publication will now in all probability be continued without intermission till its completion. This is most desirable, considering, in the present state of science, how short a time it takes for a work of this kind to become out of date, and it is already three years since the commencement of the publication of this edition.

A MOVEMENT is on foot at the Cape of Good Hope to introduce salmon and trout into the rivers of that colony; and subscriptions are being made with the view of practically testing the idea. The only obstacle seems to be in the temperature of the water. The latitude of the Cape may be roughly taken at from 28° to 35° S., which is just within the Tropic of Capricorn, and about the same as New South Wales. These latitudes are much lower than the corresponding portions of the northern hemisphere in which trout, and specially salmon, are generally found, and we doubt whether the climate would be found suitable for them. No part of New Zealand is further north than about 35° S.; and it has not yet been proved that salmon will live in the warmer parts of that country. Still, the practical test will be in the transport of salmon to the Cape, and if the experiment succeeds, the acquisition will be well worth the risk.

THERE was a shock of earthquake at Innsprück last Thursday.

STRONG shocks of earthquake were felt on the morning of the 16th inst. at Smyrna.

WE hear that Mr. Alexander Agassiz has just started on an expedition of several months' duration to South America, with the object of exploring and investigating the natural history of Lake Titicaca, and collecting antiquities from the surrounding country for the Peabody Museum.

WE are informed that in the newly-disposed Indian Museum Dr. Forbes Watson is appointed director; Dr. Birwood, late honorary secretary to the Victoria and Albert Museum, Curator of the Museum and Assistant Reporter on the Products of India; and Mr. F. Moore, who, in conjunction with the late Dr. Horsfield, prepared the catalogue of the mammals and birds of the Museum when it belonged to the East India Company, Assistant Curator together with Dr. Cooke and Lieut. Royle.

THE *Daily Telegraph* of Tuesday contains a long and interesting letter, dated Zanzibar, Oct. 19, from Mr. H. M. Stanley, the joint commissioner of that paper and the *New York Herald* to East Africa, principally in connection with the suppression of the slave trade. The letter consists mainly of an account of Mr. Stanley's journey up one of the ten mouths of the river Rufigi as far as Kisu, fifty miles from the sea. Mr. Stanley gives a glowing account of the river and the country through which it flows, and thinks its value, from a commercial point of view, cannot be too highly estimated. He corrects the accounts of previous travellers, and a map of the delta accompanying the letter professes for the first time to lay down correctly the various channels by which the river discharges its waters.

THE additions to the Zoological Society's Gardens during the past week include two Muntjacs (*Cervulus*?) from Formosa, presented by Mr. W. P. Galton; a Common Kestrel (*Tinnunculus alaudarius*), European, presented by Miss M. Truefitt; a Roseate Cockatoo (*Cacatua roseicapilla*) from Australia, presented by Mr. H. I. Aveling; a Pomerine Skua (*Lestris pomarinus*), European, new to the collection, purchased; a Black-eared Marmoset (*Hapale penicillata*) from South-east Brazil, deposited.

SCIENTIFIC SERIALS

THE *Transactions of the Linnean Society*, vol. xxx., part 2, is almost entirely occupied by Mr. Miers' paper On the Lecythidaceæ. The author prefers Lindley's proposal of erecting this group into a distinct order rather than making it a sub-tribe of Barringtonieæ, itself a tribe of Myrtaceæ, as Bentham and Hooker have done in their "Genera Plantarum." The order will then be characterised by its alternate impunctate leaves, epigynous stamens, petaloid appendage to disc on which the stamens are seated, and peculiar fruits and seeds very different from those of Myrtaceæ, and will consist of the following twelve genera:—*Gustavia*, Linn. (2 sp.); *Couroupita*, Aubl. (9 sp.); *Bertholletia*, H. and Bonpl. (2 sp.); *Lecythis*, Linn. (42 sp.); *Chytroma*, nov. gen. (Lecythis in parte auct., 25 sp.); *Eschweilera*, Mart. (46 sp.); *Jugastrum*, nov. gen. (Lecythis in parte auct., 6 sp.); *Couratari*, Aubl. (8 sp.); *Cariniana*, Casar. (7 sp.); *Allantoma*, nov. gen. (12 sp.); *Grias*, Linn. (4 sp.); and *Cercophora*, nov. gen. (1 sp.) Many of the species are now described for the first time, and the paper is illustrated by thirty-three beautiful plates, illustrative of each of the genera, and of the fruits and seeds of a large number of the species. The part contains also the Rev. O. P. Cambridge's "Systematic List of the Spiders at present known to inhabit Great Britain and Ireland:" 78 genera and 457 species.

THE *Journal of Botany* for the four months, August to November, 1874, contains the following among the more important original papers:—In descriptive phanerogamic botany, Mr. W. P. Hiern contributes Notes on Ebenaceæ, with description of a new species; Dr. H. F. Hance, a description of some Asiatic Corylaceæ; a paper On a small collection of plants from Kinkiang, and another On three new Chinese *Calami*; Mr. J. G. Baker, a paper On the genus *Androcymbium* (Colchicaceæ), with description of seven new species; a description of a new species of *Heleniopsis* (Colchicaceæ) from Formosa; and an article On the *Alliurus* of India, China, and Japan; and Dr. J. Müller describes a number of new Euphorbiaceæ collected by Dr. Lorenz in the Argentine Republic.—In cryptogamic botany, Mr. E. M. Holmes describes and draws a very rare British moss, *Dicranum flagellare*; the Rev. J. M. Crombie also describes and draws a new genus of lichens, *Phycographa*, Nyl., and gives a valuable revision of the British Collemacei.—In geographical and local botany, Miss E. Hodgson gives a sketch of the botany of North or Lake Lancashire; Mr. J. F. Duthie a very interesting paper On the botany of the Maltese Islands in 1874; Mr. T. R. Archer Briggs, Notes on some plants of the neighbourhood of Plymouth; and the editor completes his Botanical Bibliography of the British Counties.—In each number there are also, in addition, a number of short notes and queries, extracts and abstracts of important papers published elsewhere, and reviews of books. The editor continues the extremely useful practice of giving a list of the botanical papers in each month's home and foreign journals.

Astronomische Nachrichten, Nos. 2,010 and 2,011, contain a paper by H. J. H. Groneman, on his theory of the aurora. He goes into the questions of the annual variation and the eleven-year period, together with its height and magnetic effects.—In No. 2,012 there is a letter from Stephen Alexander on the observation of the varying brightness of Jupiter's satellites as seen in transit, and he discusses M. Flammarion's explanation of this phenomenon.—J. G. Galle contributes a paper on the observations of the planet Flora, made by Dr. Gould and contained in this number, and discusses them with reference to their giving a value of the solar parallax.—In No. 2013, Dr. Holetschek gives an hypothetical ephemeris for the planet Peitho (118) from Oct. 7 to Nov. 12, for the purpose of recognising the same.—A. Grützmacher gives position observations of Borrelly's comet, made during August.—Dr. Holetschek has estimated the orbit of Comet I., 1871, and contributes details of the orbit. Its period seems to be 5188 years.—C. T. W. Peters gives time observations on the solar eclipse of Oct. 9, 1874.—J. H. Safford sends his computation of the orbit of Alcmene, and an ephemeris for March and April 1875.

Zeitschrift der Œsterreichischen Gesellschaft für Meteorologie, Nov. 1.—In this number we have the first part of an article by Dr. J. Hann, on the laws of change in temperature of ascending currents of air, and some of the consequences thereof. He observes that although Poisson's equation, by means of which we may reckon the loss of temperature of ascending air by expan-

sion, has long been known, it has not been made full use of in discussing atmospheric phenomena, such, for example, as the rainfall on mountain slopes. The works of Sir W. Thomson, Reye, and Peslin bring us important information regarding the movements of ascending air, for they deduce from the mechanical theory of heat the laws of variation of temperature in ascending and descending dry and moist currents. Calculating in the first instance the fall of temperature in ascending currents where no condensation of moisture takes place, the following result is obtained :—For every 100 metres rise, nearly exactly 1° C. is lost, whatever the original level and temperature may have been ; and conversely for descending currents. If any vapour be present, as long as it is not condensed, it reduces this rate only to a very slight extent. As to the relation between pressure and temperature, a fall of 20 mm. would be accompanied by a decrease of 2·1° C., but since such a fall takes something like twenty-four hours at least, changes of this kind are probably overborne and hidden by simultaneous changes depending on other causes. Secondly, he calculates the loss of temperature in ascending currents becoming saturated and continually losing by condensation part of their moisture. This quantity differs greatly with the amount of vapour originally in the air, and therefore with the temperature at which the air becomes saturated. By means of a formula arrived at by Dr. Hann, a table has been constructed, showing the calculated loss of heat at various pressures, heights, and temperatures. An ascending column of air obeys the law for dry air until it reaches the dew-point ; after this the table should be consulted. Supposing a current at 10° C. to impinge on a mountain slope and rise to the summit, 2,600 metres high, if moist, it loses 14·8° C. ; if dry, 26°. But in descending the lee side it gains, whether moist or dry, 26°. If it was saturated at the mountain top, it will be relatively very dry after its descent ; and if originally moist, about 10° warmer than it was on the windward side.

SOCIETIES AND ACADEMIES

LONDON

Linnean Society, Nov. 19.—Dr. G. J. Allman, F.R.S., president, in the chair.—Mr. Daniel Hanbury exhibited specimens of the rose cultivated on the southern slopes of the Balkan for the production of attar of roses, which Mr. J. G. Baker stated to be probably a variety of *R. damascena*.—The President then read a paper on *Stephanoscyphus mirabilis*, the type of a new order of Hydrozoa. The author described a remarkable organism which occurs imbedded in sponges on the southern shores of France. It forms composite colonies which have a general resemblance to a campanularian hydroid, with its cup-like hydrothecæ or so-called polype cells, opening on the surface of the sponge, and, when the animal extends itself, giving exit to a beautiful crown of tentacles. It has, however, though a true hydrozoon, no immediate relation with the campanularians or with any other hitherto recognised order of Hydrozoa ; for the hydrothecæ-like receptacles are occupied not by a hydranth or polypite, but by a body which has all the essential characters of a Medusa ; and the tentacles which are displayed when the animal extends itself are really the marginal tentacles of a Medusa. It is, further, provided with the radiating and circular canals of a true Medusa. The animal is essentially a composite colony of medusiform zooids included in a system of chitinous tubes, from which, like a campanularian hydroid, each zooid has the power of extending itself, and within which it can again retreat. The author regarded the *Stephanoscyphus mirabilis* as the type of a new order of Hydrozoa, to which he assigned the name of "Thecomedusæ." He regarded Stephanoscyphus as affording a convincing proof of the homology on which he had formerly insisted in parallelising the tentacles of a hydranth with the radiating canals of a Medusa. An interesting discussion followed, in which Prof. Busk, Dr. Murie, and others bore testimony to the great importance of Prof. Allman's discovery.—Dr. Masters read a "Monograph of Durioneæ." The paper contains an enumeration of the genera and species of the tribe Durioneæ, together with descriptions of the new species found by Beccari in Borneo, &c. It is accompanied by some remarks on the morphology and geographical distribution of the group. In both respects the group is very distinct. The peculiar scaly pubescence, the compound stamens, the (in some cases) very peculiar anthers, and the muricate fruits, all constitute remarkable features. The question of "divided" or "compound" stamens, which has of late been re-discussed by Chatin, is alluded to, with the result that the author adheres to his previously expressed views on the subject—views, moreover, supported by those of Payer, Sachs, Baillon, Van Tieghem, and others. The nature of the petals in Malvales in general is also touched on ; sometimes these appear to be autonomous organs, while in other cases they seem to form part and parcel of the staminal phalanges. (For fruit of the Durioneæ as an esculent, see Wallace, and "Treasury of Botany," art. "Durio.")

Chemical Society, Nov. 19.—Prof. Odling, F.R.S., president, in the chair.—Dr. C. R. A. Wright read a paper on the action of organic acids and their anhydrides on the natural alkaloids, Part II., by himself and Mr. Beckett ; being a continuation of that which he brought before the Society at the last meeting.—Prof. W. K. Clifford then made a communication On general equations of chemical reactions, proving mathematically, from the kinetic theory of gases, the generally adopted method for expressing chemical reactions. An interesting discussion ensued, after which the following papers were read :—On propionic coumarin, and some of its derivatives, by W. H. Perkin, F.R.S. ; On the composition of autunite, by Prof. A. H. Church ; and the action of bromine on protocatechuic acid, gallic acid, and tannin, by J. Stenhouse, F.R.S.

Zoological Society, Nov. 17.—Mr. George Busk, F.R.S., in the chair.—The Secretary exhibited on behalf of the Rev. J. S. Whitmee an egg of *Pareudiastes pacificus*, and an accompanying egg of the Samoan Porphyrio.—A communication was read from Sir Victor Brooke, Bart., containing some remarks on the identity of a certain deer in the Society's collection, which had been determined as *Cervus savannarum*.—A series of eggs of Megapodes (*Megapodius*) transmitted by Mr. John Brazier, was exhibited. These had been obtained from different islands of the Solomon group.—Mr. R. B. Sharpe also exhibited some Megapodes' eggs from the southern part of New Guinea.—Prof. Mivart read a paper on the axial skeleton of the Struthionidæ, and pointed out that judging, by the characters of the axial skeleton, the Emeu presents the least differential type ; from which Rhea diverges most on the one hand and Apteryx on the other ; that the resemblance between Dromæus and Casuarius is exceedingly close, while the axial skeleton of Dinornis is intermediate between that of Casuarius and Apteryx ; its affinities, however, with the existing New Zealand form very decidedly predominating.—A communication was read from Major H. H. Godwin-Austen, describing five new species of Helicidæ, of the sub-genus Plectopylis, from the Khasi and Naga Hills, from Darjeeling and from the Burmese region.—Mr. R. Bowdler Sharpe read a paper on the larks of Southern Africa, in which an attempt was made to reduce into order the numerous genera and species of this difficult group.—A communication was read from Dr. J. Anderson, pointing out that his *Macacus brunneus* was truly distinct from *M. arctoides* of Geoffr. St. Hilaire.—A communication was read from the Count Turati and Dr. T. Salvadori, describing a new Trogon of the genus Pharomacrus, proposed to be called *P. xanthogaster*.—Dr. Albert Günther read a description of a new species of kangaroo from North-west Australia, proposed to be called *Halmaturus apicalis*.—Mr. P. L. Sclater read a notice of some specimens of the Black Wolf of Thibet, now or lately living in the Society's menagerie.—Mr. H. E. Dresser exhibited eggs of the various European species of Hypolais, together with those of *Acrocephalus streperus* and *A. palustris*, and pointed out that these two groups (Hypolais and Acrocephalus) approach each other in their eggs as well as in other characters, the two nearest allied in each group being *Hypolais rama* and *Acrocephalus palustris*.—Mr. W. T. Blanford read a notice of two new Uromasticine lizards from Mesopotamia and Southern Persia, proposed to be called *Uromastix microlepis* and *Centrotrachelus loricatus*.—A second paper by Mr. Blanford contained descriptions of two new species of ichneumon, and of a hare collected by Mr. F. Day in Sind, and new to the Indian fauna. One of the former and the hare were believed to be new to science, and were called *Herpestes ferrugineus* and *Lepus dayanus*.

Meteorological Society, Nov. 18.—Dr. R. J. Mann, president, in the chair.—The President read a "Report concerning the meeting of the Conference on Maritime Meteorology in London, August 31, 1874," which he had attended as the representative of the society.—At the request of the president, Mr. R. H. Scott gave a brief account of the recent meeting of the Permanent Committee of the Vienna Congress at Utrecht.—The following papers were then read :—On the weather of thirteen