

tribution over the hill, and the kind of rocks on which they occurred.—Notes on some British Mosses. By Mr. Wm. Wilson. Mr. Wilson referred to the British species of *Andraea*, which he had revised for the second edition of his "Bryologia Britannica," and especially to *Didymodon jenueri*, a moss recently described and figured in the Society's Transactions. The latter he believed to be in no way specifically different from *Cynodontium polycarpon*.—On the Ferns found in the Valley of the Derwent. By Mr. T. W. Mawson. Mr. Mawson enumerated twenty-eight species and varieties of ferns as indigenous to the Valley of Derwentwater, including *Asplenium germanicum*, *A. septentrionale*, *Hymenophyllum wilsoni*, *Osmunda regalis*, *Ophioglossum vulgatum*, *Allesorus crispus*, &c.

PARIS

Academy of Sciences, July 18.—M. Bertrand communicated a paper by M. L. Painvin on the determination of the elements of the angle of inflexion of a developable surface defined by its tangential equations.—Several papers on physical subjects were presented, namely—an extract of a letter from M. De la Reve to M. Dumas on the magnetic rotatory powers of liquids; further researches upon electro-capillary action, and on the formation of crystallised oxchloride of copper and other analogous compounds by M. Becquerel; a memoir on the variations of temperature produced by the mixing of two liquids by M. H. Sainte-Claire Deville, in reply to the last communication by M. Jamin, and a reply by the same author to the criticisms of M. Jamin upon a memoir published in 1860; thermal researches upon the metallic character of hydrogen associated with palladium, and on a voltaic couple, in which hydrogen is the active metal by M. P. A. Favre; and a note by M. F. Lucas, communicated by M. E. Becquerel, on the possibility of obtaining fire signals visible at a great distance, for which purpose the author proposes to employ an electric spark generated by an apparatus described by him.—M. de Saint-Venant presented a memoir on the elementary demonstration of the formula of propagation of a wave or intumescence in a prismatic canal, with remarks on the propagation of sound and light, on ressaults, and on the distinction of rivers and torrents.—A note was read by M. Sonrel on the photographic investigation of the sun at the Imperial Observatory of Paris.—MM. Becquerel and E. Becquerel presented a note on the observations of temperature made beneath the soil at the Garden of Plants from 1864-1870, by means of thermo-electric cables, with tables of results.—The following chemical papers were read:—Investigations upon the action of the chlorides of platinum, palladium, and gold upon the phosphines and arsines, by MM. A. Cahours and H. Gall; a note on the decomposition of oxalic acid by M. P. Carles, communicated by M. Bussy; and a note by M. J. Personne on the conversion of chloral into aldehyde, also presented by M. Bussy.—M. Combes presented a note by M. Flajolot on some crystallised compounds of the oxides of lead and antimony, and of oxide of lead with antimonic acid from the province of Constantine, in Algeria.—A report was read from M. Pasteur on the results of the rearing of silkworms from eggs prepared by processes of selection at Villa Vicentina.—M. C. Robin communicated a note by M. A. Sanson on the influence of the rapid development of the bones upon their density; and M. P. Balestra presented an account of his researches and experiments upon the nature and origin of marsh miasmata, from which he is inclined to believe that the miasmata of marshy places are due to the spores of algæ floating in the air.

VIENNA

Imperial Academy of Sciences, June 17.—Dr. K. Exner communicated a memoir on the sensation of light.—M. J. Schubert communicated drawings and descriptions of a lamp and of an electrical apparatus for producing sound.—M. Tschermak presented a report on the recent fall of a meteorite near Muzluk, in Fezzan.—M. K. Puschl presented a memoir on the amount of heat and the temperature of bodies.—A memoir on reflex action of the nasal mucous membrane upon respiration and the circulation of the blood, by Dr. Kratschmer, was communicated by Prof. E. Hering.—Prof. A. Winckler presented a memoir on the relations between the perfect Abelian integrals of different kinds.—M. von Littrow remarked upon the elements of Winnecke's comet, as calculated by Dr. von Oppolzer.—Prof. Hlasiwetz communicated the results of a long series of experiments made by Dr. Weselsky on the formation of the chinones; and Prof. A. Bauer noticed a compound of platinum and lead having the formula Pt + Pb.

June 23.—The following memoirs were communicated by the

Secretary:—On the path of Hind's comet (1847, I.), by Dr. K. Hornstein; on similar conic sections, by M. E. Weyr; and two theories of the movement of free resting masses, by Dr. Recht.—Dr. L. J. Fitzinger communicated the third part of his critical revision of the family of the bats, including the genera *Nyctinomus*, *Thyroptera*, *Exochurus*, *Cnephaiophilus*, and *Vesperus*.—A memoir by Prof. G. Hinrichs (of Iowa), on the statistics of crystalline symmetry, was read, as also a note on the annual course of the temperature at Klagenfurt, Trieste, and Arvavaralja, by Dr. K. Jelinek.

BERLIN

Royal Prussian Academy of Sciences, May 5.—Professor Ehrenberg read a communication on the increasing knowledge of invisible life in the rock-forming *Bacillariæ* of California.

May 12.—Professor Poggendorff read a memoir upon some new and remarkable properties of the diametrical conductors of the electrical machine and on a double machine founded upon these. This paper, which is of considerable length, is illustrated with a figure of the new double machine.—Professor W. Peters read a description, illustrated with figures, of *Platemys tuberosa*, a new species of tortoise from British Guiana.

May 19.—Professor Rammelsberg read a paper on the composition of the meteorites of Shalka and Hainholz.

May 23.—Professor Ewald read a paper on some questions relating to the geology of the Andes.

GÖTTINGEN

Royal Society of Science, April 6.—A paper by M. W. Krauss on the anterior epithelium of the cornea was read.

April 27.—M. A. Clebsch communicated a paper by Prof. C. Schweigger on the size of the ophthalmoscopic picture, and M. L. Meyer read a note on the occurrence of granular cells in the nervous centres.

May 7.—Prof. Sartorius von Waltershausen read a memoir on the isomorphism of the sulphates of lead, baryta, strontian, lime, potash, soda, and ammonia.—Dr. M. A. Stern presented a simple proof of the law of quadratic reciprocity, and some propositions connected therewith.—M. A. Clebsch read a paper on certain problems of the theory of algebraic surfaces.—M. W. Klinkerfues presented a note of some investigations on the movement of the earth and sun in the æther.—Prof. Enneper read a paper on a problem of mathematical geometry, and Prof. Kohlrusch a notice of the influence of temperature on the coefficients of elasticity of certain metals.

BOSTON

Natural History Society, *Section of Entomology*, March 23.—Mr. S. H. Scudder in the chair. "Synopsis *Pseudoscopionidum synonymica*," by Dr. H. Hagen.—Dr. Hagen stated that Dr. A. S. Packard, jun., had recently discovered in Brunswick, Maine, and in Salem, a species of *Amphientomum*, a genus of Neuroptera, whose body is covered with scales, and heretofore known only from Ceylon.—The following paper was read:—"On the Synonymy of *Thecla Calanus*," by Samuel H. Scudder.

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ERRATUM.—Page 235, second column, line 24, for "Caprera" read "Capri."