

on the effects of trichinæ on white rats, by C. Rodig.—On a method of preparing slugs for dry keeping in collections, by F. Hübner.—Geological recollections of a few weeks at Weymouth, by Dr. Filby.—Some remarks on *Cyprææ*, by Dr. Aug. Sutor. On the homoptera of Schleswig, by Dr. H. Benthin.—Finally, there are a number of papers relating to the fauna of the Lower Elbe, some of which are highly interesting.

THE March number of the *Bulletin de la Société d'Acclimatation de Paris* contains, among other papers, one by M. E. Rénard, on a new kind of bamboo, and the articles made from the canes of this species of plant. This particular variety is square, and is found in the Chinese provinces of Honan and Se-tchuen.—M. le Comte Pouget, in a note on the Kagou, describes a new bird known by that name in New Caledonia, of which it is a native, and called *Rhynochetos jubatus* by ornithologists. The bird is entirely insectivorous, feeding on almost every kind of insects and worms, and appears to thrive in the climate of France.—M. Gildas, a priest in the monastery of Notre Dame de la Trappe des Trois Fontaines, near Rome, gives a description of the growth of Eucalyptus trees in the Roman Campagna; the salubrity of the locality has, partly in consequence of sanitary works, and partly probably in consequence of the effect of these trees, been greatly increased of late years.—The Colorado potato beetle (*Doryphora decemlineata*) is being made the object of special research by members of the Society. M. Maurice Girard states that as this insect does not exist always in close contact with the plant on which it lives, it will probably suffer from the change of climate to which it is subjected by transportation from America to Europe, and will consequently die off. Had it been, like the Phylloxera, an insect living always closely fixed to the tree on which it preys, there would have been greater danger of its permanent introduction into other countries.

SOCIETIES AND ACADEMIES

LONDON

Anthropological Institute, June 22.—Col. A. Lane-Fox, president, in the chair.—A paper by Mr. Herbert Spencer was read on the comparative psychology of man. The author commenced by showing the necessity for division of labour in a systematic study of psychology, and proceeded to map out the subject into divisions and subdivisions, and to indicate the manner in which its various branches might be investigated. The main divisions were—mental mass and complexity, the rate of development, plasticity, variability, impulsiveness, difference of sex, the sexual sentiment, imitation, quality of thought, peculiar aptitudes, with their many subdivisions. Mental effects of mixture, and the inquiry how far the conquest of race by race has been instrumental in advancing civilisation, would also come within the scope of comparative psychology.—Mr. John Forrest read an account of the natives of Central and Western Australia, whom he had observed during two journeys he had made across the country from Western to South Australia. Among their customs might be mentioned that of tattooing on the shoulders, back, and breast, and the practice of boring noses, which is raised to the importance of a ceremony, when hundreds of individuals gather together for that object. Circumcision he found to be universal. The use of the boomerang was described, and the exaggerated statements concerning the manipulation of the weapon were corrected. Cannibalism was common among the natives of the interior. Many other descriptive details of their faith, manners, and customs were given.—A paper by Capt. John A. Lawson was read on the Papuans of New Guinea. The only part of the coast that the author examined was Houl-tree, and there, as in the interior, he met with a race of people dissimilar to those described by other travellers who have visited various parts of the coast. There was a marked diversity in stature; in the south of the island the people were shorter than those inhabiting the north. They were possessed of enormous muscular power, and showed a large thoracic development. Their complexion was a dark tawny, but not black, and their features were of Negroid type.

Royal Horticultural Society, June 2.—Scientific Committee.—J. D. Hooker, M.D., C.B., P.R.S., in the chair.—Prof. Thiselton Dyer made some further remarks on *Tetranychus Taxi*, A. Murr., which he thought did not attack the ordinary buds of the Yew, but, as far as he had observed, those containing the female flowers. The acarid appeared to feed on the nucleus of

the ovule and the adjoining scales, the external scales became brown and withered.—The Rev. M. J. Berkeley showed specimens of *Hypoxyylon octraceum*, which was figured by Bulliard, tab. 444, fig. 3. It had been referred by Fries to *Lophium mytilinum*, but was really, as Sowerby was aware, the cocoon of a midge. Mr. Berkeley had met with similar cocoons belonging to other species, and Prof. Westwood was understood to be preparing descriptions of all three.—Prof. Thiselton Dyer exhibited specimens of the capsules of *Hibiscus Rosa-sinensis*, which, though the plant was so common in gardens, were quite undescribed. According to Dr. Cleghorn, it rarely if ever fruited in India. In Barbados, on the other hand, it fruited abundantly in the garden of General Munro.—Mr. Andrew Murray read a paper on the packing of living plants for transport.—Prof. Thiselton Dyer called attention to Willkomm's "Die mikroskopischen Feinde des Waldes," in which the Larch-canker was shown to be due to the attacks of the so-called "*Corticium amorphum*," since described by Hartig as *Peziza Willkommii*.

General Meeting.—W. Burnley Hume in the chair.—The Rev. M. T. Berkeley called attention to the more interesting objects exhibited. The young shoots of apple-trees were liable to great injury from an *Oidium*, which might, however, be destroyed by the use of sulphur; specimens were exhibited.

June 16.—Scientific Committee.—A. Murray, F.L.S., in the chair.—A letter was read from the Hon. Secretary of the Wiltshire Horticultural Society relating to some diseased potatoes, upon which Mr. Berkeley remarked that he had recently found the American varieties at Chiswick, especially the Early Rose, dreadfully affected with disease, communicated from the tuber to the haulm. Mr. Berkeley had hitherto been only able to make a superficial examination, but he suggested that possibly the disease in question was analogous to the "curl," a disease well known many years ago, but since then not noticed. He had found in the cells of the leaf an obscure fungoid organism—a species of *Protomyces*.—Mr. Bateman exhibited a package of the Paraguay tea, *Ilex paraguayensis*, together with the gourd and strainer used by the natives in the preparation of this tea, as figured in Hooker's *Journal of Botany* many years since.—Mr. W. G. Smith exhibited a drawing of the mould (*Ascomyces deformans*) which is associated with the Peach blister.—Dr. Masters exhibited on the part of the Rev. H. N. Ellacombe a portion of the main root of an apple nearly gnawn through by the Water Vole. Dr. Masters also showed *Cheiranthus Cheiri* var. *gynanthus*, to show that the peculiarity was reproduced from seed.—Dr. Hooker sent for exhibition the nest of a trap-door spider found in the bark of a tree at Uitenhage, Port Elizabeth, South Africa, where it was obtained by Mr. Bidwell, a member of the Legislative Assembly of Cape Town. The nest and the lid were so nearly like the bark itself that it was with difficulty the lid could be seen, and it was with some difficulty that the lid could be raised, as the insect was still within the nest. Mr. Murray suggested that the spider had taken possession of the empty cocoon of a moth (*Bombyx*), and had woven a lid to it with silk and fragments of bark.

General Meeting.—Hon. and Rev. J. T. Boscawen in the chair.—The Rev. M. J. Berkeley gave an account of the new potato disease, which he identified (as mentioned above) with that formerly known as the "curl."

PHILADELPHIA

Academy of Natural Sciences, Sept. 22, 1874.—Dr. Ruschenberger, president, in the chair.—Prof. Leidy remarked that he had found several specimens of the curious rhizopod, discovered by Cienkowski, and named by him *Clathrulina elegans*. They were found among Utricularia, but though retaining their stems, were unattached and apparently dead. One of the specimens presented a peculiar and as yet unexplained character. On one side of the latticed head the orifices were capped with little inverted hemispherical cups, from the top of which projected a funnel like the cup of the spongozoa. Prof. Leidy was pursuing his search for the living and attached *Clathrulina*.—Prof. Leeds made some remarks concerning a remarkable mineral found in a bank of white sand near Fayetteville, N. C. It was, in appearance, a rod of glass four feet in length and two inches in diameter, which was made up of a great number of irregular fragments. These fragments were highly polished on one side, the side apparently turned towards the hollow axis of the rod, and excessively contorted on the exterior side. They consisted almost entirely of siliceous, the remainder being chiefly oxide of iron. Accurate analysis showed that the percentages of the constituents in these siliceous

fragments and in the sand found in the hollow core of the rod were the same. On account of this identity in composition, and the incompetency of any other known agent to produce such a fusion of almost pure silice, it was concluded that this "rod of glass" was a result of lightning—a lightning-tube, or fulgurite, as such products have been called.—Mr. Thomas Meehan referred to a former communication in which he exhibited specimens of *Euphorbia cordata*, or *E. humistrata*, collected by him in the Rocky Mountains, and which, normally procumbent, had assumed an erect habit on being attacked by a fungus, *Aecidium euphorbiae hypericifolia*. He now found that the common trailing *Euphorbia* of our section, *E. maculata*, when attacked by the same fungus, assumed the same erect habit. With change of habit of growth there was a whole change in specific character in the direction of *E. hypericifolia*.

Sept. 29.—Dr. Ruschenberger, president, in the chair.—On favourable report of the committee to which it was referred, the following paper was ordered to be printed:—"Notes on the Santa Fé Marls, and some of the contained Vertebrate Fossils," by E. D. Cope.

Oct.—Mr. Thomas Meehan introduced a specimen in which plants of *Triticum* and *Bromus* were blended. This Dr. J. G. Hunt proved to have been a "cheat;" neither did he think the workman had been expert in his manipulation.—Mr. Redfield drew attention to the growth, near Delaware River, of *Polygonum orientale* and *Cleome pungens*, which Prof. Leidy traced to ballast deposited there. The lastnamed author then drew attention to 3 new species of *Diffugia*.—Mr. Meehan announced the discovery of *Abies concolor* in Glen Eyrie, Colorado, by Dr. Engelmann; and Prof. Leidy drew attention to the devastation of the oaks of New Jersey, by the *Dryocampa senatoria*.

Nov.—Mr. A. R. Grote presented a paper on a new species of *Noctelide*, describing as new genera and species *Acronycta exilis*, *A. paupercula*, *Eutolyte*, *Himella*, &c.; and Prof. Cope described some ruins of villages of extinct races near Nacimiento, N.M.—Prof. Leidy, besides referring to *Titanotherium*, drew attention to several Protozoa which he was studying, including species of *Clathrulina elegans*, *Amoeba viridis*, &c.—Prof. P. Frazer, jun., described the geology of certain lands in Ritchie and Tyler Counties, W.V.; and Dr. Elliott Coues read a synopsis of the *Muridae* of North America, dividing the Murinæ into the genera *Mus*, *Neotoma*, *Sigmodon*, *Hesperomys* (Waterhouse, emend.), *Ochelodon* (n.g.); and the Arvicolinæ into *Evolomys* (n.g.), *Arvicola*, *Synaptomys*, *Myodes*, *Cuniculus*, and *Fiber*.

VIENNA

K. K. geologische Reichsanstalt, Jan. 5.—This was a festival meeting in celebration of the 25th anniversary of the foundation of this institution. No scientific papers were read. From those read at the subsequent meetings, Jan. 19, Feb. 16, March 2 and 16, we note the following:—Geological report from travellers in Persia, by Dr. E. Tietze.—On the Aralo-Caspian basin, by Dr. M. Neumayr.—On some pseudomorphous copper ores from the Ural, by E. Döll.—On well-sinking in the Vienna district, by T. Fuchs.—On Tertiary stone formations in Carniola, by the same.—On the formation of terra rossa, by Dr. Neumayr.—On a new occurrence of manganic peroxide in Lower Styria, by Dr. R. v. Drasche.—On the gneiss formation of the Bohemian forest, by Dr. J. Woldrich.—On the geological results of the railway diggings between Rakonitz and Beraun, by H. Wolf.—On the occurrence of antimony near Eperies, by L. Manderspach.—On the ores of Laurion in Attica, by A. Schlehan.—On some new silver ores from Joachimsthal, by J. v. Schröckinger.—On the lime of the Acropolis of Athens, by Dr. M. Neumayr.—On the environs of Predazzo and on the Monzoni mountains, by Dr. C. Doelter.—On the interior structure of the Offenbánya mining district and on that of the Boitza district, by F. Posepny.—On some petrifications from the Kalnik mountains, by Dr. R. Hörmes.—On some slaked stone mounds in Bohemia, by Dr. J. Woldrich.

PARIS

Academy of Sciences, June 28.—M. Frémy in the chair.—The president welcomed M. Janssen in the name of the Academy on his return to Paris, and M. Janssen made some remarks in reply.—The following papers were read:—On the explanation of numerous phenomena which are consequences of old age, by M. Chevreul.—On the work in course of execution at the Observatory, by M. Leverrier. Among other observations it is proposed to carry on a series with a view to constructing magnetic and meteorological charts of France.—Magnetic obser-

vations made in the Peninsula of Malacca, by M. Janssen. The observations were undertaken with a view to fixing the present position of the magnetic equator, which the author found to pass between Ligor and Singora. A meridian was found also in which the magnetic declination was 0°. This note is dated from Singapore, May 16.—On the distribution of magnetism in a thin bar of great length, by M. J. Jamin.—On the cyclone at Châlons; second examination of facts and conclusions, by M. Faye.—On the distribution of an acid among several bases in solutions, by M. Berthelot.—On the hydrocarbons produced by the distillation of the crude fatty acids in presence of superheated steam, by MM. A. Cahours and E. Demarcay. The authors found in a sample of oil from Fournier's stearine candle factory the following hydrocarbons: amyl, hexyl, and heptyl hydrides; likewise the hydrides of octyl, nonyl, decyl, undecyl, dodecyl, and cetyl.—Note on tabular electro-magnets with multiple cores, by M. T. du Moncel.—Note accompanying the presentation of the first volume of the "Analytical and Experimental Demonstration of the Mechanical Theory of Heat," by M. Hirn.—Influence of compressed air on fermentation, by M. P. Bert.—Memoir on the earth's motion of rotation, by M. E. Mathieu.—Study of electric discharges through fine metallic wires, by M. Melsens.—On the influence of magnetism on the extra current, by M. Trène.—Chemical equivalence of the alkalies in the ashes of various vegetables, by MM. Champion and H. Pellet.—On the presence of hydrogen dioxide in the sap of vegetables.—On the work of the expedition commissioned to study the project of a central sea in Algeria, by M. Roudaire.—Solar parallax deduced from the combination of the Noumea with the Saint-Paul observations, by M. C. André.—On the numerical values of the musical intervals in the vocal chromatic gamut, by M. Bidault.—New sounding flames, by M. C. Decharme.—Action of chlorine on isobutyliodhydric ether, by M. Prunier.—On the portative force of M. Jamin's magnets, by M. A. Sandoz.—New apparatus relating to respiration, by M. G. Carlet.—Of the influence of the noxious *Solanacea* in general, and of belladonna in particular, on Rodents and Marsupials, by M. E. Heckel.

BOOKS AND PAMPHLETS RECEIVED

AMERICAN.—The Birds and Seasons of New England: Wilson Flagg (Trübner and Co.)—Annual Report of the Board of Regents of the Smithsonian Institution (Washington).—Important Physical Features exhibited in the Valley of the Minnesota River. An Essay, by G. K. Warren (Washington).—Proceedings of the American Philosophical Society.—Transactions of the Academy of Science of St. Louis. Vol. iii. No. 2.—Bulletin of the Essex Institute, 1874.—Report of the Geological Survey of Missouri, U.S., and Atlas to same

FOREIGN.—Notizblatt des Vereins für Erdkunde. 3te Folge, 13tes Heft (Darmstadt).—Nach den Victoriafällen des Zambesi, von Eduard Mohr. 2 vols. (Berlin, Ferdinand Hirt und Sohn).

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