

Early Science at Oxford.

April 27, 1686. The Society gave Mr. Musgrave their thanks for ye care and paynes he has taken in executing the office of Secretary.

Dr. Bagley's letter of Nov. 26th. 1683, and Dr. Tyson's of December 6th., both concerning ye *Lumbricus latus* were read.

Dr. Smith communicated part of a letter from France, wherein some mention was made of young dogs recovered from drowning, by some salts.

Mr. Musgrave communicated a Discourse which he received from a freind of his concerning *Dyalling*: Mr Caswell was desired to give the Society some account of it the next meeting.

1687. Mr. President was pleased to communicate a Discourse concerning the Regulation of Easter, for 2000 years, and the moveable feasts according to the computation of the Church of England.

Mr. Caswell gave an account of some bodys weighed hydrostatically, by weighing them in aer and water. 'Twas observ'd by him that the Calculus humanus is lighter in specie than any known sort of Stones.

April 28, 1685. A Letter from Mr. William Molyneux dated Dublin April 4 was read; in it was contained a Transcript of Sir William Petty's *Suppelleæ Philosophica*, as it was presented to the Dublin Society, which also was read, and the thanks of ye Society ordered to be returned for it.

Mr. Aston communicated an account of ye Curiosities brought from Ceylon by Dr. Heerman, Professor of Botanics at Leyden.

A Letter from Dr. Pierce of Bath dated April 11 was read; it gave a farther relation of the Evets found alive in ye middle of a stone.—Dr. Cole of Worcester then described a case of Haemophoria, after which Mr. Bainbrig affirm'd, that ye little end of a Dutch Tobacco-pipe (ye piece about 2 inches in length) having been thrust into ye bladder by a Boy was cut out, and is now to be seen at Leyden.

A Letter from Mr. Aston was read containing a proposall of Dr. Lister's of cutting for ye stone by entering ye Abdomen a little above ye Os Pubis, and opening the ffund of the bladder; on which account Mr. Bainbrig informed the Society, that one, Colbron, a Chirurgion at Haysham in Sussex, has taken out the stone of the bladder this way with successe. Mr. Bainbrig is desired by the Society to procure a full Relation of the particulars of this Operation; and Mr. Pigot is desired to try ye Experiment on a Dog.

April 29, 1684. Mr. President, takeing ye chair, gave order for ye reading of a letter dated April 24, from Mr. Aston; which affirmed, that ye experiment of makeing Plaister of Paris perspicuous, by striking turpentine thro it, was tried, and succeeded, before ye Royall Society. The substance mentiond in ye Minutes of Aprill ye 15th, and sometimes supposd to be a petrified heel of a shooe, breaking when bor'd; ye peices of it were produced, and judged to have been *always* stone: This gave occasion to some discourse, concerning such stones as are of a shape resembling some other body in nature, and are not found in beds, of which sort ye stone now mentiond is an example: and Dr. Plott acquainted ye Society, that he found a stone in Staffordshire in form like ye *heart* of a pullet; having lines in it, answering to ye coronary vessells of that muscle.

A Letter from Dr. Huntingdon to Dr. Plott, concerning ye porphyry pillars in Ægypt, was read: in it were enclosed ye draughts of two Pillars taken in that place. This letter being written at ye request of this Society, it was order'd that our thanks should be returnd to Dr. Huntingdon for this obligation.

Societies and Academies.

LONDON.

Geological Society, March 11.—O. T. Jones: The geology of the Llandovery district (Carmarthenshire). The district lies east of the town of Llandovery, and extends for about 10 miles from north-east to south-west. It is divisible into a northern area and a southern area. In each area the succession is fairly complete, but in between them it is greatly attenuated. In proceeding from south to north, certain lithological changes have been noted in the Lower Llandovery. The fauna in the rocks appears in the main to have been drifted into the area from an adjoining tract, lying probably nearer to the shore-line. In addition to the differential subsidence and uplift along lines trending north-east and south-west, there is evidence of repeated elevation and depression along nearly east-and-west axes. The axes of these transverse movements appear to have persisted during the whole of the Llandovery epoch, but there is no evidence of them in the Wenlock rocks.—G. Andrew: (1) The Llandovery and associated rocks of Garth (Breconshire). The Llandovery rocks lie north-west of Garth railway station, and extend from there in the direction of Newbridge. The Lower Llandovery rocks overlie the Bala with a sharp boundary, but with apparent conformity. The Middle Llandovery occurs in one small outcrop in the centre of the area, and is rapidly overstepped by the Upper Llandovery in both directions. The Upper Llandovery consists of two types, a lower comprising sandy mudstones with *Pentamerus oblongus*, etc., and an upper of pale mudstones ("Tarannon Pale Shales"). (2) The relations between the Llandovery rocks of Llandovery and those of Garth. At Garth, as at Llandovery, the Lower and Middle Llandovery rocks are overstepped both north and south by Upper Llandovery or Wenlock deposits. At Garth they crop out in an elongated oval area; at Llandovery they form two roughly oval areas. The Middle Llandovery and the higher divisions of the Lower Llandovery are represented only in the central regions. These distributions are due to the fact that differential movements along nearly east-and-west axes (that is, transversely to the present strike) were in progress during the Llandovery epoch. The regions where the older Llandovery rocks are most complete were regions of persistent subsidence. The axes of elevation in both areas cross the present strike at practically regular intervals of about 5 miles, and the areas of subsidence are situated nearly midway between them.

Linnean Society, March 19.—S. Hirst: Species of mites of the family Trombidiidæ found on lizards. When more than one form occurs on the same host, a flattened form lives under the scales, and a rounded form between the toes or toe pads. In view of the considerable differences in the shape of the setæ, etc., these are regarded at present as distinct species.—Mrs. Muriel Roach: A study of the physiology of certain soil algæ in pure culture. Although a very few species carried on the synthesis of organic substance from carbon-dioxide and water through the agency of sunlight, the great majority of those studied grew much better when supplied with an additional source of carbon, glucose being especially favourable to many species. A single species was selected for a more detailed investigation of the effect of different organic substances on its growth in liquid media. The alga was able to grow in complete darkness, given a suitable supply of food, at about half the rate that it grew in the same medium in the light. The logarithmic values of the bulk for the first nine

or ten days, in media completely favourable to the growth of the organism, lie on a straight line. The data indicate the importance of the compound interest law which evidently underlies the growth of the organism during the initial part of its growth. The theory of the auto-catalytic nature of growth does not appear to hold.—J. M. Brown: Some Collembola from Mesopotamia. Fifteen species of Collembola collected mainly in the neighbourhood of Bagdad and Amara, in Mesopotamia. Ten species and one variety are regarded as new. The Collembolan fauna of Mesopotamia shows much closer affinity with that of the Palæarctic than with that of either the Oriental or the Ethiopian regions.

CAMBRIDGE.

Philosophical Society, March 2.—H. Munro Fox: (1) Biology of the Suez Canal; (2) The effect of light on the vertical movement of aquatic organisms.—J. Brill: On a group having the Lorentz group for a sub-group.—A. W. Veater: On transvectant series.—E. V. Appleton and M. A. F. Barnett: A note on wireless signal strength measurements made during the solar eclipse of January 24, 1925. Measurements at Cambridge on short wave wireless signals from London have shown that the signal intensity exhibits variations which, though practically inappreciable during the day, become apparent about sunset and continue throughout the night. Typical sunset variations were found to be associated with the recent solar eclipse. The variations are attributed to interference between the direct ray along the ground and an indirect ray returned from the upper atmosphere. Such an indirect ray may be produced by ionic deviation without undue absorption if the mean free path of the effective ions is large, as suggested by Larmor. If the carriers are electrons, however, the action of the earth's magnetic field on the phase velocity of the radiation cannot be neglected. The possibility of a violation of the reciprocity relation between two wireless stations is thus suggested (*v. also* NATURE, March 7, p. 333).—H. W. Turnbull: A geometrical treatment of the correspondence between lines in three-fold space and points of a quadric in five-fold space.—J. B. S. Haldane: The origin of the potential differences between the interior and exterior of cells.—V. Nath: Spermatogenesis of *Lithobius forficatus*.—J. Gray: The mechanism of cell-division (II.).—J. T. Saunders: The trichocysts of Paramœcium.

EDINBURGH.

Royal Society, March 23.—Andrew Balfour: Reflections on malaria. Discussing the geographical distribution of malaria, special reference was made to the case of Scotland. Formerly malaria was prevalent in Scotland, but it has now declined. Anophelines still abound in Scotland, and it is quite possible that indigenous cases of malaria still occur. A combined mosquito and malaria survey might well be undertaken, if only from the scientific and academic point of view. In discussing malaria as a cause of death, emphasis was laid on the condition of liver failure which so often occurs. The value of the splenic index as a diagnostic method was considered, and its limitations defined. The introduction of stovarsol as a rival to quinine in the treatment of malaria and the nature of the malaria toxin were discussed.

MANCHESTER.

Literary and Philosophical Society, February 17.—J. M. Gulland and R. Robinson: The constitution of codeine and thebaine. Experimental evidence was

adduced in favour of the assumption that dihydrocodeinone contains the group $-\text{CO}-\text{CH}_2-$. Thebaine and codeine are now regarded as containing the groups $-\text{C}(\text{OMe})=\text{CH}-\text{CH}=\text{C}$ and $-\text{CH}(\text{OH})-\text{CH}=\text{CH}-$ respectively, whilst the ethanamine chain $-\text{CH}_2\cdot\text{CH}_2-\text{NMe}-$ connects positions 9 and 13 in the phenanthrene ring. The new formulæ are closely allied to the bridge formulæ previously suggested.

March 3.—A. Lapworth: (1) A comparison of some properties of cyanohydrins, carboxylic acids and phenols. The abnormalities of the $\cdot\text{CO}_2\text{H}$ group are notorious. It is now shown that the charged (CO_2) radicle of the carboxylic acid ion behaves as if it were a single atom, and that on this conception the relative strengths of most *meta*- and *para*-substituted phenols, anilines, and benzoic acids are in excellent harmony with the application previously made of the principle of induced alternate polarities to the affinity constants of the cresols. (2) Replaceability of halogen atoms by hydrogen atoms: a general rule. Some ions, such as H^+ and diazonium ions, some elements, including ozone, the halogens, and some compounds, including hypochlorous acid, carbonyl compounds, and $\alpha\beta$ -unsaturated ketones, etc., have some properties in common and are termed "cationoid." Ions, such as CN' , $\text{C}:\text{C}.\text{R}'$, OEt' , OH' , the negative ions of *sodio*-malonic ester, and some non-ionised compounds such as NH_3 , ethylenic and acetylenic hydrocarbons, phenol ethers and vinyl ethers, have other properties in common, and are termed "anionoid." The "anionoid" properties of ethylenic hydrocarbons are held to be closely related to Thomson's observation that methyl is frequently observed in vacuum tubes with a positive charge, but never with a negative charge. The addition of a negatively charged ion to one of a pair of doubly-bound carbon atoms would leave the other as a trivalent carbon atom with a negative charge. These generalisations are closely related to the ease of replaceability of a halogen atom by hydrogen, and the following rule is stated: If $\text{X}-\text{H}$ is an acid or compound in which H may be displaced by the direct action of an alkali or of a metal, then the halogen in $\text{X}-\text{Cl}$, $\text{X}-\text{Br}$, $\text{X}-\text{I}$ will have some "cationoid" properties, and will be easily replaced by hydrogen. This rule is true whether XH is a so-called "tautomeric system" or not.

PARIS.

Academy of Sciences, March 9.—A. Desgrez, H. Bierry, and L. Lesœur: The blood globules and alkaline reserve.—S. Winogradsky: A method for estimating the nitrogen fixing power of soils. The medium chosen is a silica gel, for the preparation of which exact details are given. The number of azobacters is determined in the course of the operation, the amount of nitrogen fixed being estimated by the usual Kjeldahl method. It is claimed for the method that it can be used by agricultural chemists who are not experts in microbiology.—Luc Picart was elected corresponding member for the section of astronomy in succession to the late M. Stéphan.—Sir John Russell was elected a corresponding member for the section of rural economy in succession to M. Winogradsky, elected foreign associate.—M. Légaut: Skew algebraic curves.—Gaston Julia: Series of iteration and quasi-analytic functions.—Pierre Humbert: Zonal hyperspherical functions.—Léon Pomey: The theorem of existence and two modes of representation of the solutions of ordinary differential equations.—W. Stozek: The direction of harmonic functions in the neighbourhood of an exceptional point.—A. Lafay: The eddy currents of rotating cylinders.—Léon Bloch,

Eugene Bloch, and Georges Déjardin: The spark spectrum of neon. Wave-lengths and intensities of the lines of the neon spark spectrum are given for wave-lengths between 4922 and 2757.—M. Charron: The resultants of the radiation pressures on the walls of any cavity whatever.—Pierre Goby: Stereoscopic microradiography in relief and in pseudo-relief: the stereomicrograph.—Stefan Triandafil: The influence of acidity on the galvanic polarisation of nickel.—Tourneux and Mlle. Pernot: The aqueous and acetone solutions of potassium bromo- and iodomercurates.—Fred Vlès and Edmond Vellinger: Remarks on the variations of the rotatory power of tartaric acid as a function of the P_H . The relation between the rotatory power and hydrogen-ion concentration of tartaric acid has been studied experimentally over the range P_H 0-14. By applying the usual formula for the dissociation equilibria of dibasic acids and calculating the rotation as the sum, for each P_H , of the rotations of the two ions and its residue of dissociation, the experimental results are explained.—Lemarchand: The carrying down of magnesium by calcium oxalate.—Yvon: Syntheses made starting with the sodium derivative and the mixed magnesium derivative of methylacetylene.—H. Rosset: Phosphorus chloronitride. $PNCl_2$, treated in toluene solution with phenylmagnesium bromide gave as one of the products of the reaction the compound $(PN(C_6H_5)_2)_3$. The constitution developed for this substance is based on the formula attributed to phosphorus chloronitride by Wichelhaus and Stokes.—Marcel Godchot: The two 1,3-dimethyl-4-cyclohexanones and the corresponding dimethylcyclohexanols. The existence of four 1,3-dimethylcyclohexanols is proved.—A. Demolon: The texture of the quaternary sediments and the soils derived from it.—Jovan Cvijic: The Merokarst.—L. Lutz: The specificity of some hymenomycetes growing on wood. Some of these fungi grow exclusively on certain species of plants, and this peculiarity has been supposed to be due to the presence in these plants of substances necessary to the life of the parasitic fungi. The experiments described tend to show that the specificity of these fungi is not due to the presence of suitable nutritive substances, but, on the contrary, to the presence or absence of certain substances injurious to the growth of the fungus.—J. Nageotte: The extreme contraction of striated muscle in the frog.—Léon Blum and Maurice Delaville: The study of the modifications of the blood and humours by ultrafiltration.—A. Rochon-Duvigneand, E. Bourdelle, and J. Dubar: The determination of the monocular anatomical visual field of the horse by the method of the transcleral image.—Abelous, Argoud, and Soula: The structural modifications of certain organs, especially the pancreas, in animals without spleen.—L. Mercier and Raymond Poisson: Hens with crossed beaks. A coaptation of mechanical origin.—Robert Weill: Experimental retardation of the nematocysts in the Coelenterata. Rendering permeable the capsular wall.—Boris Ephrussi: The fecundation membrane of the egg of the sea-urchin (*Paracentrotus lividus*). The action of the coelomic liquid.

March 16.—Paul Appell: Extension of a theorem of Monge.—P. Widal, P. Abrami, Diaconescu, and Gruber: Digestive hæmoclasia and the state of neuro-vegetative tonus. Objection has been taken to some of the earlier experiments published by the authors on the ground that there is insufficient proof that the results are wholly due to the condition of the liver. Additional experiments have been carried out, specially arranged to test the validity of this objection. The results confirm the original experiments.—André Blondel:

A method of harmonic analysis of the waves of alternating currents by comparison with a polyharmonic standard alternator.—J. B. Senderens: The preparation of cyclohexenols by the catalytic dehydrogenation of cyclohexanediols. By testing the cyclohexanediols (resorcite, quinite) with from 3 to 4 per cent. of diluted sulphuric acid ($H_2SO_4 + 3H_2O$) a mixture of cyclohexadienes and cyclohexenol is obtained, and the conditions can be arranged to give either the hydrocarbon or alcohol as the main product. Details of the preparation, properties, and reactions of Δ_3 -cyclohexenol from resorcite and from quinite are given.—Ph. Glangeaud: The rôle of the secondary volcanoes in the Monts Dore massif during the glacial periods. The volcano of Saint-Pierre-Colamine (Puy-de-Dôme). The existing topography of the Sancy volcano is the result of the action of numerous secondary volcanoes arising on its sides, afterwards brought into relief by glacial action.—M. René Koehler was elected a corresponding member for the section of anatomy and zoology.—Kraitchik: Fermat's numbers.—G. Y. Rainich: A representation of surfaces.—Paul Urysohn: A metric universal space.—Maurice Fréchet: The notion of the differential in general analysis.—Henri Milloux: Meromorph functions with asymptotic value and the theorem of Picard.—St. Kempisty: A new method of integration of measurable functions not capable of summation.—J. Guillaume: Observations of the sun made at the Observatory of Lyons during the fourth quarter of 1924. Details of observations on spots and faculæ made on 60 days during the quarter.—Aubusson de Cavarlay and Descours Desacres: An automatic method of drawing roads. The apparatus, placed upon a vehicle moving over a road, records the plan of the road in three dimensions.—F. Baldet: The third negative group of carbon, the so-called comet-tail spectrum. Extension of the red end and the structure of the bands. The carbon monoxide was under a pressure of 10^{-4} mm., the spectrum being induced by electronic bombardment, with 20 minutes' exposure of the plate. This reproduces exactly, with the same relative intensities of the bands, and in the minutest detail, the well-known comet-tail spectrum.—J. Laffay: The spark spectrum of mercury in the extreme red.—Jean Lecomte: The infra-red absorption spectrum of the alcohol function. By the use of a fluorspar prism, the region 2.75μ to 8μ has been studied. The mono-alcohols show two zones of strong absorption: from 3μ to 3.5μ and from 6.85μ to 8μ . Details of the absorption bands of twenty-six alcohols are given.—E. Huguenard, A. Magnan, and A. Planiol: A hot-wire apparatus for the determination of great altitudes. A modification of the hot-wire anemometer: at a height of 14,000 metres its sensibility is nearly eight times that of a barometer.—Mlle. Irène Curie: The homogeneity of the initial velocities of the α rays of polonium. There are no indications of differences of initial velocities of the α rays of polonium. If uniform distribution of velocities is assumed, the extreme deviation does not exceed 0.3 per cent.—Louis Jacques Simon: The relation between the structure of the unsaturated mono-carboxylic acids and their comparative sulphochromic oxidation.—J. Orcel: Two clinochlores containing chromium from Togo.—Jean Jung: Some types of crushed rocks from the Vosges.—Louis Barrabé: The nature of an eruptive massif, the "Antatika-Ambereny," from the west of Madagascar.—L. Cayeux: The relative age of the phthanites and dolomites of the carboniferous limestone of the North of France and of Belgium.—J. Savornin: The Djebel Ayachi (Morocco).—J. Thoulet: Submarine volcanoes at great depths.—Gabriel Guilbert: The causes

of the rapid destruction of cyclones.—Paul Guérin : The anther of the Gentianaceæ. The development of the pollen sac.—Pierre Lesage : Extension of acquired character and facts of heredity in *Lepidium sativum* watered with salt water. The alteration in the seed produced by salt water is an acquired character preserved after three generations in the absence of salt.—A. Maige : The evolution and "greening" of the plants in the cotyledon cells of various leguminous plants during germination.—M. Bridel and C. Charaux : On an unstable glucosidic complex in the bark of the stem of *Rhamnus cathartica*. A complex glucoside extracted from the bark gives on hydrolysis primeverose and derivatives of oxymethylanthraquinone.—E. and G. Nicolas : Hexamethylenetetramine can serve as a food for plants. New researches on bean and white mustard.—Mlle. F. Coupin : The state of the brain at birth in the chimpanzee.—R. Herpin : Egg production and development in a sedentary polychetal annelid, *Nicolea zostericola*.—Auguste Lumière : Some new anticoagulating bodies of definite chemical composition. Of eighteen compounds studied, five have shown a high anticoagulating power. Of these, sodium mucate is anticoagulating at a concentration of 0.4 per cent. and has no toxic power.—Emile F. Terroine and H. Spindler : The influence of various methods of pasteurisation by heating on the digestibility of the albumenoid and mineral constituents of milk. Three methods were compared : heating to 63° C. for 25 minutes with stirring, heating to 95° C., and the Stassano method. None of the methods interferes with the digestibility of the milk.—Jules Amar : Mercurial poisoning and vital coagulation.—A. Malaquin : The germinal cells (gonocytes) are, in the course of the asexual reproduction of *Salmacina Dysteri*, the source of the blastogenic proliferation.—Marc Romieu : A new chemical reaction of dry proteid materials applicable to histochemistry. Sirupy phosphoric acid at about 50° C. gives a purple changing to violet with proteids. It appears to be a tryptophane reaction and is not given by gelatin.—Ph. Joyet-Lavergne : The reactions of a tissue to parasitism ; lipoidogenesis and lipogenesis.

ROME.

Royal Academy of the Lincei, December 7.—Gabriella Armellini Conti and G. Armellini : Visual brightness of lunar seas. The fact that the mean brightness of lunar seas is about 0.048 and that of the land areas about 0.096 indicates that the seas represent gigantic laval and basaltic lakes, whereas the land area is constituted largely of trachite and pumice.—M. La Rosa : Radial velocities and the ballistic theory of variable stars.—Luigi Palazzo : Magnetic determinations in the larger islands of the Mediterranean Sea.—Secondo Franchi : New traces of overthrust in the Western Alps.—Mario Manarini : The problem of primitive functions.—Paolo Stranco : Deduction and interpretation of some Einsteinian ds^2 symmetrical about an axis.—L. Matteuzzi : Determination of forced and free seiches by means of a Volterra's integral equation of the second species.—Bruno Finzi : A new hydrodynamic paradox.—Vittorio Nobile : The possibility of a rigorously rational arrangement of the fundamentals of stellar position astronomy.—Giorgio Abetti : Spectroscopic parallaxes of the stars belonging to Secchi's first type.—Remo de Fazi : Studies on the indones. VI. Methods of preparing indones.—P. Leone : Organo-metallic compounds of aluminium. Various aluminium alkyl halides and also aluminium phenyl iodide have been prepared by boiling the alkyl halides, in very dry condition, with metallic aluminium.—Paolo Principi :

New observations on the geology of the deep valley of Tevere.—E. Onorato : Celestine from S. Gaudenzio (Senegal).—E. Caroli : A caviated Mysidacea (*Spelaeomysis bottazzii*) from Terra d' Otranto.—S. Sergi : The myorabdotic cellular groups of the lumbo-sacral region of the spinal medulla of the chimpanzee.

January 18.—F. Cavara : Floral atrophy in *Phoenix dactylifera* from Cyrenaica. The atrophy to which the male flower of the date palm is sometimes subject in the neighbourhood of Benghazi is shown to be due to attack by an organism which belongs to the Mucedineæ and is reproduced only by conidia ; for this organism, previously not described, the name *Mauginiella Scaetia* is proposed.—Fil. Bottazzi : Influence of temperature on the tissues and on their colloidal components. VII. Rigidity caused by cold.—Luigi Fantappiè : Reduction of Pincherle's distributive operations to Volterra's linear functionals.—F. Vercelli : Results obtained during the cruise of the Italian royal ship *Marsigli* in the Straits of Messina. This paper consists solely of tidal data.—E. Fermi : Collision between hydrogen nuclei and atoms. The collision between a nucleus and an atom of hydrogen results finally in two nuclei and an electron, all separate. When the relative energy of the collision is greater than that of ionisation, ionisation may occur continuously.—Maria De-Angelis : Presence of vesuvianite in the asbestiferous deposits of Val Malenco.—Roberto Savelli : Transmission of mutations through inter-specific hybridisations ; procedure in the first series of experiments. Apart from its great technical limitations, inter-specific hybridisation repeats the results of pure succession and shows that, whether the direct physiological cause of the somatic extrinsications of the mutation be of hormonal or other character, its genetic substrate consists of a Mendelian unit.—Mario Gianotti : Variations produced in the ammonia content of the blood by exertion at high and low altitudes. During a state of rest, the blood of a human being at a great altitude (more than 4000 metres) contains more ammonia than on the plains ; this phenomenon may be explained by the acapnia produced by rarefied air. Since, then, the blood exhibits diminished alkalinity at a height, fatigue will the more readily result in a condition of acidosis which will require the circulation of abnormally large amounts of ammonia.—A. Rabbero : Action of sea-bathing on the reaction of the blood. Sea-bathing, during which continued swimming is indulged in, is followed, not only by vigorous pulmonary ventilation and increased elimination of carbon dioxide, but also by diminished power of the blood to resist changes in its reaction. The bases remaining in the blood are rapidly expelled, presumably by way of the kidneys.—Constantino Gorini : Further investigations on mammary microflora.

VIENNA.

Academy of Sciences, February 12.—A. Bachofen-Echt : The discovery of iguanodon tracks in the Neocomian of the island of Brioni near Pola. Near Cape Rocca in Brioni the strata of Neocomian limestone are almost exactly horizontal. The massive slabs of easily worked fine-grained stone have been quarried back from the cliff edge. Ripple marks show that in the chalk era there was a flat shore here. Two sorts of tracks are found—a three-toed footprint 26 cm. long, another 13 cm. long, perhaps iguanodons of different ages ; also five-toed tracks, perhaps tortoises.—L. Waldmann : The geological structure of the primitive rocks between the Moldau and Danube on the survey sheet Gmünd. The principal rocks are orthogneiss, amphibolite, granulite, granite-gneiss, etc.—R. Danzer : Organic compounds of lead.