

The boxes of grapes were washed ashore, and the seeds germinated in abundance, so that the governor was able to collect plants for his garden.

BERLIN

German Chemical Society, July 28.—O. Liebreich, vice-president, in the chair.—A. Laderburg described a simple way of obtaining zinc-methyl and its action on silicic ether. The result is a liquid boiling at 150° of the formula  $\text{SiCH}_3(\text{OC}_2\text{H}_5)_3$ , to which he gives the name ortho-silico-acetic ether. The same chemist, conjointly with Demole, has transformed chlorhydric into acetochlorhydrine of glycol. The latter by treating oxide of ethylene with aniline has obtained a single base of the formula of phenylated mono-oxyethylene-amine  $\text{C}_6\text{H}_5\text{OHCH}_2\text{NHC}_6\text{H}_5$ .—O. Jacobsen has been able to investigate human bile obtained from a fistula of a strong and healthy man. It contained no taurocholic acid, while other human biles obtained from patients contained both glycolic and taurocholic acids in variable proportions.—A. Faust has transformed monochlorinated phenol into resorcin (and not, as Petersen communicated lately, into hydrochinon.—H. Limpricht has compared sulpho-ortho-toluidinic acid and many of its derivatives, with those of sulpho-pseudo-toluidinic acid.—Thomas Dykes Barry described several derivatives of propiophenone  $\text{C}_6\text{H}_5\text{COC}_2\text{H}_5$ : viz., two isomeric mononitropropiophenones, amido-propiophenone, and secondary propylbenzol-alcohol  $\text{C}_6\text{H}_5\text{CH}_2\text{OH}\cdot\text{C}_2\text{H}_5$ .—G. Goldschmidt, in treating benzol and bromal with sulphuric acid obtained diphenyltribrom-ethane  $(\text{C}_6\text{H}_5)_2\text{CH}\cdot\text{CBr}_2$ . This treated with potash yields diphenyl-dibrom-ethylene  $(\text{C}_6\text{H}_5)_2\text{C}_2\text{Br}_2$ , and heated with zinc powder, it is transformed into stilbene  $\text{C}_{14}\text{H}_{12}$ .—P. Liechto has determined the atomic weight of molybdenum = 95.86, and describes the following chlorides:— $\text{MoCl}_2$ ,  $\text{MoCl}_3$ ,  $\text{MoCl}_4$ ,  $\text{MoCl}_5$ , and  $\text{MoO}(\text{OH})_2\text{Cl}_2$ .—A. Michaelis and G. Köthe find that iodide of lead treated with sulphite of sodium yields sulphite of lead and iodide of sodium, and that the salt formerly described by Zinero  $\text{I}_2\text{SO}_3(\text{ONa})_2$  does not exist.—A. Michaelis and O. Schifferdcker describe the following compounds of sulphur:— $\text{SCl}_4$ , existing only at temperatures below -20°,  $\text{S}_2\text{O}_3\text{Cl}_4$ , (a solid body obtained by treating  $\text{SO}_3\text{HCl}$  with  $\text{SCl}_4$ ), and its product of decomposition by moist air  $\text{S}_2\text{O}_5\text{Cl}_2$ .—A. Mitscherlich described a new method of organic analysis. He replaced oxide of copper by that of mercury, weighs the reduced mercury,  $\text{CO}_2$  and  $\text{H}_2\text{O}$  in the ordinary way, and thus determines the oxygen contained in the substance, as well as the Cl, I, Br retained by the mercury or the sulphur and phosphorus transformed into sulphate and phosphate of mercury.—A. Borodin in treating valeric aldehyde with solid caustic potash at 0° obtained alcoholic products of condensation of the following formula;  $\text{C}_{10}\text{H}_{18}\text{O}\cdot\text{C}_{20}\text{H}_{33}\text{O}_3$ . The former left for three years with diluted soda yielded crystals of the composition  $\text{C}_{20}\text{H}_{42}\text{O}_5 = (\text{C}_{10}\text{H}_{20}\text{O}_2)_2 + \text{H}_2\text{O}$ .

(polymeric valeric)

C. Engles, by treating monochlorinated acetonitrile  $\text{NC}\cdot\text{CH}_2\text{Cl}$  with aniline replaced Cl by  $\text{NHC}_6\text{H}_5$ , thus obtaining a base, anilido-acetonitril.—A. Emmerling and C. Engles have obtained from acetophenone the corresponding pinacone and secondary alcohol.—E. Baumann, by treating cyanamide with sulphuric acid and water, has obtained a body of the composition of urea, but hygroscopic giving a nitrate of a different crystalline form, and a double salt with chloride of platinum, in a t differences that seem to indicate that this body is a new compound isomeric with urea.—E. Mulder described several derivations of uric acid and of urea.—C. Tiemann compared two methods for determining nitric acid in water. The wells of Beriin yield water containing great quantities of nitric acid, viz. 17 in 100,000 instead of 0.4, which is generally admitted to be the maximum quantity allowed for drinking purposes. It should be known, however, that the water-works supply the town with river water of good quality.—C. Biedermann showed beautifully coloured salts of mononitrophenol with alkalis and alkaline earths.—W. H. Pike, of London, has succeeded in obtaining some of the higher homologues of oxaluric acid by heating a molecular mixture of urea or sulpho-carbamide with an anhydride of a dibasic acid. The acids already obtained are succin-carbaminic acid  $\text{NH}_2-\text{CO}-\text{NH}-\text{CO}-\text{C}_2\text{H}_4-\text{COOH}$ , succin-sulpho-carbaminic acid  $\text{OH}_2-\text{CS}-\text{NH}-\text{CO}-\text{C}_2\text{H}_4-\text{COOH}$ , and citracon-sulpho-carbaminic acid  $\text{NH}_2-\text{CS}-\text{NH}-\text{CO}-\text{C}_3\text{H}_4-\text{COOH}$ .—The next meeting of the society will take place the 13th of October.

PARIS

Academy of Sciences, Aug. 4.—M. Bertrand, president, in the chair.—The following papers were read:—A further

portion of M. Hermites' paper on the exponential function.—A reply to M. Vicaire's theory of the sun, by M. Faye. The author controverted the statement that the sun is a cold mass of combustible matter burning at the surface only, in an atmosphere of oxygen.—On the determination of the wave-lengths of the lines in the ultra-violet, and also in the ultra-red parts of the spectrum by means of phosphorescence, by M. Ed. Becquerel.—On the action of armatures applied to compound magnets, by M. Jamin.—On the reciprocal displacements between the hydracids, by M. Berthelot. The author has been investigating the heat phenomena produced by these reactions.—Note on the cubic capacity and on the volume of air requisite to insure the healthfulness of inhabited places, by General Morin. The general gives the results of observations on barracks and hospitals. As regards the former, he thinks that 16—20 cubic metres of space are required per man, equal to 565—706 cubic feet.—The fourth part of M. A. Ledieu's paper on thermodynamics was then read.—An analysis of Dewalgnite from Sain Chateau, Belgium, by M. F. Pisani.—On the Cocuyos of Cuba, by Señor de dos Hermanas. The cocuyo is a luminous insect, said by M. Blanchard, at the conclusion of the paper, to belong to the genus *pyrophorous*, to which also a Mexican insect of the same name belongs.—Mémorial on cerebral localisations, and on the functions of the brain by Dr. Fournie.—On polychromic photography, by M. L. Vidal. This was a description of a recently patented method of obtaining coloured prints by the use of various pigments, as in carbon printing.—M. Lichtenstein communicated a paper on the present state of the Phylloxera question, and M. Signoret one on the evolution of the Phylloxera.—Fourth note on the maximum resistance of magnetic coils, by M. T. du Moncel.—On electric condensation, by M. Neyreneuf.—Studies on nitrification, II., by M. Schloesing.—On the corundum of North Carolina, Georgia, and Montana, by Mr. Laurence Smith.—On Roman essence of chamomile, by M. E. Demarçay.—On the characteristics of the true polyatomic alcohols, by M. Lorin.—On the variation in the amount of urea excreted under normal nourishment, and under the influence of tea and coffee, by M. E. Roux. The author found that these substances very largely increase the amount of both urea and chlorine voided in the urine, if they be taken after abstinence from them, but that when continuously used, the quantity gradually returns to its normal amount. Hence he regards this action as that of the washing out of accumulated urea.—On the uniformity of the action of the heart when that organ is free from external nervous influences, by M. Marey.—On some effects produced by lightning at Troyes, on July 26, 1873, by M. E. Parent.

PAMPHLETS RECEIVED

ENGLISH.—Improved Method of Recording Telegrams: Richard Herring.—Report of the kaduliffe Observer to the Lord of Trustees, read at their meeting at Oxford.  
FOREIGN.—Medizinische Jahrbucher heraus geben von der K. K. Gesellschaft der Arzte, redigirt von S. Stricker, Jahrgang 1873, Heft I. and II. (W. Braunmuller, Wien.)—Översigt af Kongl. Vetenskaps Akademiens Förhandlingar, Trettionde Argangen, 1873, Nos. 2, 3, 4 (Stockholm).—Bulletins de la Société d'Anthropologie de Paris, Fasc. 1, Jan. et Feb., 1873.

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