

was made to the library, the financial affairs, the proposed alterations of the bye-laws, and the recent meteorological conference at Leipzig; and the Council concluded by stating that they had had under consideration that evening a letter from the Board of Trade with reference to sending a representative to the Meteorological Congress to be held at Vienna in September next. The President then delivered an Address in which he chiefly referred to the progress of the Society during the two years that he had occupied the presidential chair. The following gentlemen were elected officers and council for the ensuing year:—President—Dr. Robert James Mann, F.R.A.S. Vice-presidents—Arthur Brewin, F.R.A.S., George Dines, Henry Storke Eaton, Lieut.-Col. Alexander Strange, F.R.S. Treasurer—Henry Perigal, F.R.A.S. Trustees—Sir Antonio Brady, F.G.S., Stephen William Silver, F.R.G.S. Secretaries—George James Symons, John W. Tripe, M.D. Foreign Secretary—Robert H. Scott, F.R.S. Council—Charles Brooke, F.R.S., Charles O. F. Cator, Rogers Field, C.E., Frederic Gaster, James Glaisher, F.R.S., John Knox Loughton, F.R.A.S., William Carpenter Nash, Thomas Sopwith, F.R.S., Rev. Fenwick W. Stow, M.A., Capt. Henry Toynbee, F.R.A.S., Charles Vincent Walker, F.R.S., E. O. Wildman Whitehouse, C.E.

BERLIN

German Chemical Society, June 9.—A. W. Hofmann, president, in the chair. A. Behr and Van Dorp report oxide of lead heated in iron tubes to be a good oxidising agent for organic vapours: $C_2H_4(CuO)_2$ yielding $C_2H_4(CuO)_2$, &c.—E. Salkowsky has found that taurine escapes digestion in the human body to a large extent. A small quantity of the following compound, however, passes into the urine; a crystallised acid of the empirical formula, $C_3H_8N_2SO_4$, forming quadratic plates, which are easily soluble, and giving well-crystallised salts with Ba, Ag, &c. With baryta water it yields taurine, carbonic acid and ammonia. The acid appears to be a substitution product of our hydrogen in taurine through carbaminic acid. Dr. Salkowsky took 5 grammes of taurine for twelve days following without suffering any great inconvenience to his health.—T. Thomsen sent in the results of very numerous experiments on the heat absorbed or developed by dissolving various salts in water. The same *savant* attacks the calorimetric method employed by Berthelot, and disputes his conclusions as to the existence of a hydrate $HCl + 8H_2O$.—K. Heumann has found that copper in contact with sulfide of ammonium becomes covered with crystals of subsulfide Cu_2S , according to the reaction $2CuO + 2(NH_4)_2S = Cu_2S + 4NH_3 + 2H_2O + S$.—II. v. Gegenfeld reports on the action of hypochlorous acid $HClO$ on allylic chloride. The dichlorhydrine thus formed he considers as isomeric with that prepared from glycerine, while L. Henry obtained a body through the same reaction, which he considers as identical with ordinary dichlorhydrine.—L. Bisschopnick has studied the amides and the nitrites of the three chloracetic acids, particularly with regard to their physical properties. The most prominent result is the following irregularity in the boiling points of the nitriles, namely:—

$CH_3.CN$	boils at	$81 - 82^\circ$
$CH_2Cl.CN$	„	$123 - 124^\circ$
$CHCl_2.CN$	„	$113 - 113^\circ$
$CCl_3.CN$	„	$83 - 84^\circ$

The foregoing remarks were accompanied by a note of M. L. Henry on the boiling-points of the cyanides of negative radicals. He points out that if in HCN , H is replaced by a negative element or radical, the boiling point sinks; thus HCN 26° , $Cl.CN$ 15° , $CN.CN$ -21° , adding other examples, and the attempt of an explanation of this exceptional phenomenon. The same chemist has continued his researches on propargylic alcohol C_3H_3OH . He has found its boiling point equal to 114° , and he has prepared the bromide, the iodide, the sulfocyanide, and the acetate belonging to it. In treating brominated allylic alcohol $C_3H_4Br.OH$ with potash, he obtains besides propargylic alcohol an ether $(C_3H_4Br)_2O$, and perhaps also propargylic ether, which has not as yet been obtained in the pure state.

PARIS

Academy of Sciences, June 16.—M. de Quatrelages, president, in the chair. The following papers were read:—On the combustion heat of formic acid, by M. Berthelot.—On the alloys used for gold coinage, by M. Eug. Pelegot. The author advocated the addition of zinc to the alloy, and at the same time the reduction of the gold to a very great amount. He mentions with

favour alloys containing from 48 to 66 mill. zinc, 354 to 372 copper, and 580 to 581 gold.—A report on the papers on *Phylloxera*, by MM. Duclaux, Max. Cornu, and L. Faucon was presented.—On the complete movements of a ship oscillating in calm water, by MM. O. Duhil, de Benazé and P. Risbec. The authors gave an account of their experiments on the *Elorn*, a vessel of 100 tons displacement.—Photo-chemical researches on the use of gases as developers, and on the influence of physical conditions as regards sensitisation, by M. Merget, was a paper on some of the chemical phenomena of photography.—On a scientific balloon ascent on the 26th April, 1873, by MM. Crocé-Spinelli, Jobert, Pénaud, Petard, and Sivel.—Announcement of the discovery of Planet 132 at Washington on the 14th June, by Prof. Henry.—Researches on electricity produced by mechanical actions, &c., by M. L. Joulin. Researches on essence of alan-gilan (*Unona odoratissima*), by M. H. Gal. The author has discovered benzoic acid in this essence, and believes that this is the first instance of this body being found in an essence, it having hitherto been found only in the balsams.—Contributions to the history of the histologic constitution of Moitig's glarin, by M. A. Bechamp. This paper related to the gelatinous body found in the sulphurous springs of the Pyrenees. The author finds that microscopic examination shows it to be a mass of microzymes imprisoned in a hyaline matrix. He has tried various experiments on its action as a ferment.—On the estimation of the total nitrogen in manures, by M. H. Pellet.—On the estimation of phosphoric acid in natural phosphates, super-phosphates, and manures, by M. H. Joulie.—On a process for the estimation of hæmoglobin in blood, by M. Quinquaud.—On the determination of the mechanical equivalent of food, by M. A. Sanson. The author pointed out the immense value to all employers of animal motive power, such as military authorities, &c., of the value of a method for ascertaining the value in work of the forage they use for their horses. He estimated the value of 1 kilo. of protein in a good average ration, as, in round numbers, 1,600,000 metre-kilograms.—Experimental researches on the influence of barometric changes on the phenomena of life, 11th note, by M. P. Bert.

DIARY

THURSDAY, JUNE 26.

SOCIETY OF ANTIQUARIES, at 8.30.

FRIDAY, JUNE 27.

QUERETT CLUB, at 8.

SATURDAY, JUNE 28.

GEOLOGISTS' ASSOCIATION.—Excursion to Hatfield.

TUESDAY, JULY 1.

SOCIETY OF BIBLICAL ARCHAEOLOGY, at 8.30.—The Fall of Nineveh and the First Year of Nebuchadnezzar, King of Babylon: J. W. Bosanquet.

WEDNESDAY, JULY 2.

HORTICULTURAL SOCIETY.—Rose Show.

BOOKS RECEIVED

ENGLISH.—Field Pocket Book for the Auxiliary Forces: Colonel Sir Garnett Wolsley (Macmillan and Co.).—Education of Man (Charles Griffin & Co.).—Light Science for Leisure Hours. 2nd Series: R. A. Proctor (Longmans & Co.).—The Old Faith and the New: Dr. F. Strauss (Asher & Co.).—The Scholar's Arithmetic: Lewis Hensley (C. P. S. Macmillan & Co.).

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