

undergoing decomposition ; it is easily soluble in water, but scarcely dissolves in alcohol or in ether.

Acid barium orthosulphobenzoate crystallizes in needles, which suffer partial decomposition at 250° . Orthosulphobenzoic acid can be prepared from benzoic sulphinide by heating this compound in a sealed tube to 150° , with concentrated hydrochloric acid. In a reverse manner, when the neutral potassium salt of orthosulphobenzoic acid is treated with phosphorus pentachloride, the product treated with ammonia, and hydrochloric acid is added, a precipitation of benzoic sulphinide occurs. Phthalic acid, when submitted to the above treatment, yields an imide of the formula, $C_6H_4 \left\langle \begin{array}{c} CO \\ CO \end{array} \right\rangle NH$, differing, however, in properties from Laurent's phthalimide. The authors further mention an unsuccessful attempt to convert orthosulphobenzoic acid into phthalic acid, by treatment with sodium formate.

On an Unusual Case of Electrolysis, J. W. MALLETT (I, 488).—The author notes that a Smee's galvanic battery, not being in use, was laid aside, when the plates, which were originally raised out of the acid, accidentally became immersed in the liquid, which was of unusual strength. It was afterwards found that the zinc plates were very much corroded, and that one of the sheets of platinized silver foil was thickly coated with zinc, of which over 30 grms were removed. The battery liquid had doubtless first become converted into zinc sulphate, which had subsequently acted as a "decomposing cell," and metallic zinc was electrolytically deposited from its salt.

Berichte der Deutschen Chemischen Gesellschaft.

Abstractor, ARNO BEHR, Ph.D.

On Methylated Diethyleneamines, H. F. MORLEY (I3, 222).—Monomethyldioxethyleneamine and dimethyloxethyleneamine were prepared by the action of chlorhydrine ($C_2H_4Cl.OH$), on methylamine and dimethylamine respectively.

On the Oxidation of Substituted Phenols, G. MAGATTI (I3, 224).—The acetylated compound of tetrabromoparadiphenol, dissolved in glacial acetic acid, is oxidized by fuming nitric acid. The result is a crystalline body of the formula of tetrabromdiphenylquinone, $C_6H_2.C_6H_2.Br_4O_2$. This is a simple analogue to cedrret, a colored substance found in wood-tar.

On Some Derivatives of Parabromaniline, M. DENNSTEDT (13, 228).—A number of these derivatives, such as bromphenylurethane, bromphenyleyanate, bromphenylglyocol, etc., were prepared according to the usual methods.

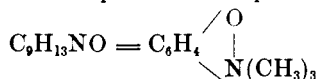
Crystallographic Description of Benzylorthoethioformic Ether, $\text{CH}(\text{C}_2\text{H}_5\text{S})_3$, M. DENNSTEDT (13, 238).

Discussion of the Question if Hypoxanthine is a Product of the Decomposition of Certain Albuminoids, E. DRECHSEL (13, 239).—Not suitable for abstraction.

On Dinitroparatoluidine, F. BEILSTEIN (13, 242).—This paper treats on the molecular constitution of two isomeric dinitroparatoluidines, one prepared by Beilstein and Kuhlberg, by nitration of paracetoluide, and the other prepared by Tiemann, by reduction of trinitrotoluole.

On Ethylene Iodopierate, L. W. ANDREWS (13, 244).—This substance, of the formula $\text{C}_6\text{H}_2(\text{NO}_2)_3\text{O}\cdot\text{C}_2\text{H}_4\text{I}$, was prepared by acting on silver pierate with a solution of ethylene iodide in chloroform.

On a New Class of Ammonium Compounds, PETER GRIESS (13, 246).—This new class of bases is obtained from the isomeric amidophenols with methyl iodide. Orthotrimethylphenolammonium is prepared by adding a concentrated solution of caustic potassa to a mixture of orthoamidophenol chloride and methyl iodide dissolved in methylic alcohol. The orthotrimethylphenolammonium iodide, which is the primary product of this reaction, is decomposed by argentic oxide. On evaporation, the watery solution yields crystals of the hydrate of the new base. The anhydrous base is obtained by heating to 105°C . Its composition is represented by the formula:



By dry distillation, the free base is transformed into an isomeric substance, which was obtained in the form of an oil, and proved to be orthodimethylamidoanisole: $\text{C}_6\text{H}_4 \begin{array}{l} \diagup \text{O}\cdot\text{CH}_3 \\ | \\ \diagdown \text{N}(\text{CH}_3)_2 \end{array}$ The chlorohydrate of the base, on heating, yields methyl chloride and orthodimethylamido-phenol: $\text{C}_6\text{H}_4 \begin{array}{l} \diagup \text{OH} \\ | \\ \diagdown \text{N}(\text{CH}_3)_2 \end{array}$ Paratrimethylphenolammonium was also prepared from paramidophenol, in an analogous manner, with methyl iodide, but when the latter was replaced by ethyl iodide, a different reaction took place.

On Vesbium and Norwegium, C. RAMMELSBERG (13, 250).—The author calls attention to communications regarding these new

elements, made by Scacchi, in the *Transactions of the Academy of Sciences of Naples*, and by Dahll, in the *Zeitschrift der Geologischen Gesellschaft*.

Regarding Albuminoids, A. STUTZER (13, 251).—Preliminary notice, showing that the hydrated oxide of copper can be used for the separation of the albuminoids, proper, from other nitrogenous bodies, such as asparagine, leucine, the alkaloids, etc., which do not form insoluble compounds with it, and showing further, that by the action of pepsine and hydrochloric acid on albuminoids, only a certain proportion of these substances is decomposed in the generally known manner, while on another definite proportion this reagent has no effect. This refractory substance seems to contain phosphorus, and to be related to nucleine.

On Tropicine, A. LADENBURG (13, 252).—The author finds that this substance, first described by him, *Ber. d. d. chem. Gesell.*, 12, 944, can be prepared in a state of greater purity by the action of dilute sulphuric acid on tropine, $C_8H_{16}NO = C_8H_{13}N + H_2O$. The paper contains, also, a crystallographic description of the chloroplatinate of tropidine.

On Hyoscyamine, A. LADENBURG (13, 254).—This paper contains several experiments undertaken to decide the question, if hyoscyamine is identical or isomeric with atropine. Though the products of decomposition of hyoscyamine with barytic hydrate, seem to be identical with those of atropine, the author thinks that the alkaloids themselves are not identical.

On Duboisine, A. LADENBURG (13, 257).—After purification of the base by transformation into the compound of its chloride with gold chloride, which forms a well crystallized body, it was found to be identical with hyoscyamine.

History of the Law of Periodical Atomicity, LOTHAR MEYER (13, 259).—Contains a reclamation of the author's share in the development of the law of periodical atomicity.

On the Acetyl Compounds of some Carbohydrates Prepared according to Liebermann's Process, A. HERZFELD (13, 265).—The author some time ago prepared and described a series of acetyl compounds of carbohydrates, following the above mentioned process. Further investigation has shown that this process—boiling with acetic anhydride and sodium acetate—furnishes, in each case, a compound in which the hydrogen atoms of all the hydroxyl groups contained in the carbohydrates, are replaced by acetyl groups.

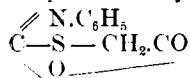
Thus octacetyl diglucose and the octacetyl compounds of galactose, saccharose, maltose, and the triacetyl compounds of erythro- and achroodextrine, were obtained. The number of acetyl groups was ascertained by decomposition with dilute sulphuric acid and titration.

On "Rouge Francais," W. V. MILLER (13, 268).—This dye-stuff, which is now manufactured in France, and is used for dyeing wool crimson, is a mixture of two coloring substances produced by the action of diazonaphthalenesulpho acid and diazobenzolesulpho acid on betanaphthole. The author found it advantageous to use zinc dust and pure water, without any acid, for the splitting up of these azo compounds.

On Oxacrylic Acid, P. MELIKOFF (13, 271).—Monochlorolactic acid, obtained by the addition of hypochlorous acid to acrylic acid, when treated with alcoholic potassa, loses HCl and yields the new substance. It can be obtained in crystals, and forms a number of crystalline salts. If the watery solution of the lime salt is heated to boiling, the latter is transformed into the lime salt of glycerinic acid. By heating with water, the free acid can also be transformed into glycerinic acid. This transformation consists in the addition of the elements of one molecule of water.

On the New Lines in the Spectrum of Hydrogen, and the Dissociation of Calcium, HERMANN W. VOGEL (13, 274).—Not suitable for abstraction.

On Phenyl Mustard Oil Glycolide, C. LIEBERMANN and M. VOELZKOW (13, 276).—This new body is prepared by heating phenylsulphurethane, or mustard oil, with chloracetic acid and alcohol, to 160° C. Its composition is represented by the formula,



When decomposed by boiling with a solution of barytic hydrate, it yields carbonic acid, aniline and sulphoglycolic acid.

Contributions to the Knowledge of the Aromatic Products of the Animal Body, E. BAUMANN (13, 279).—The author had found that hydroparacumaric acid was the principal product of the putrefaction of tyrosene. He thought it probable that the same acid might be formed from albuminoids, during the process of digestion in the animal body, and looked for it in human urine. He found an aromatic oxy acid of similar properties, which, however, proved to be the lower homologue of the hydroparacumaric acid, that is, paraoxyphenylacetic acid.

On the Action of Phosphorus Pentachloride and Phosphorus Oxychloride on Cinchonine Chloride, W. KOENIGS (13, 285).—Phosphorus pentachloride and phosphorus oxychloride do not react singly with cinchonine, but a mixture of both does. A new derivative of cinchonine, containing chlorine, is produced. Its formula is either $C_{19}H_{21}ClN_2$ or $C_{19}H_{19}ClN_2$.

On the Production of Anthranilic Acid from Orthonitrotoluole, PH. GREIFF (13, 288).—A substance of the empirical formula of a bibromnitrotoluole, had been prepared by Wachendorff from orthonitrotoluole and bromine. But, being soluble in alkalis, its constitution might be expected to be different from that of bodies of the class mentioned. The author finds that it is, in fact, bibromanthranilic acid, and calls attention to the remarkable reaction by which oxygen and hydrogen, contained in the nitro and methyl groups, change their places within the molecule during the reaction with bromine. $C_6H_4Br_2.NO_2.CH_3$, bibromnitrotoluole. $C_6H_4Br_2.NH_2.CO_2H$, bibromanthranilic acid.

Reports on American and Foreign Patents Relating to Chemistry.

American Patents.

Condensed from the Official Gazette of the U. S. Patent Office, by ARNO BEHR.

May 4, 1880.

227,168.—*Insulating compound for telegraph wires.* WILLIAM W. JACQUES.
Bees-wax and Venice turpentine.

227,268.—*Coating iron surfaces.* JOSEPH KINTZ.

Claim: The process for bronzing iron surfaces, which consists in cleaning and buffing the iron surfaces, then electroplating with copper, then dipping in acid solution, then again buffing, then boiling in a salt-of-tin solution, and then finishing by subjecting the article to heat, until the copper and spelter coatings are fused into bronze.

May 11, 1880.

227,352.—*Composition for insulating telegraph wires, coating metals, covering roofs, and for other purposes.* EDGAR EVERHART.

Consists of resin or lac. asphalt, coal-tar or pitch, powdered charcoal and infusorial earth.

227,395.—*Triturating and mixing apparatus.* JAS. TREGURTHA.

227,396.—*Dissolving apparatus.* JAS. TREGURTHA.