

INDEX OF SUBJECTS, 1926.

A.

- Acacetin**, synthesis of (ROBINSON and VENKATARAMAN), 2344.
- Acenaphthypyridine** derivatives (NAIR and SIMONSEN), 3140.
- β -5-Acenaphthylaminocrotonic acid**, ethyl ester and acenaphthylamide of (NAIR and SIMONSEN), 3142.
- Acetaldehyde**, photolysis of (BOWEN and WATTS), 1607.
- Acetanilide *p*-disulphone** and *disulph*-oxides (CHILD and SMILES), 2699.
- Acetanilide-*m*-sulphinic acid** (CHILD and SMILES), 2699.
- Acetanilide-*p*-sulphonyl iodide** (CHILD and SMILES), 2701.
- Acetic acid**, and its ammonium salt, equilibria of water and (SUGDEN), 960.
beryllium salt, conductivity of (SIDGWICK and LEWIS), 2538.
magnesium salt, constitution of aqueous solutions of (RIVETT), 1063.
silver salt, reduction of, by sodium formate (COUTIE), 887.
sodium salt, reactions of, with salts of weak metallic bases (BRITTON), 269.
ethyl ester, effect of various salts and compounds on solubility of (GLASSTONE, DIMOND, and JONES), 2935; (GLASSTONE, DIMOND, and HARRIS), 2939.
- Acetic acid**, chlorobromo-, optical activity of, and its salts (READ and McMATH), 2183.
thiol-, ethyl ester, nickel derivative (DRUMMOND and GIBSON), 3076.
- Acetic acids**, substituted, *sec.*- β -octyl esters, and their rotation (RULE and MITCHELL), 3202.
- 5-Acetoacetamidoacenaphthene** (NAIR and SIMONSEN), 3143.
- Acetoacetic acid**, ethyl ester, absorption spectra of (MORTON and ROSNEY), 706.
condensation of 3-bromo- and 3-nitro-4-dimethylaminobenzaldehyde with ammonia and (HINKEL and MADRL), 161.
- Acetoaceto- α -naphthalide** (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2253.
- Aceto-*o*-anisidides**, nitro- (C. K. and E. H. INGOLD), 1317.
- Acetone**, photolysis of (BOWEN and WATTS), 607.
catalysis of the reaction between iodine and (DAWSON and CARTER), 2282; (DAWSON and DEAN), 2872.
equilibrium of sodium iodide with (WADSWORTH and DAWSON), 2784.
condensation of β -phenylhydroxylamine and (BANFIELD and KENYON), 1612.
 δ -phenylthiosemicarbazone (STEPHEN and WILSON), 2534.
semicarbazones (BAIRD and WILSON), 2373.
- Aceto-*p*-nitrobenzomethylamide** (BRADY and DUNN), 2415.
- Aceto-2-nitro-3-methoxy-*p*-toluidide**, and its hydrochloride (ROBINSON and SHINODA), 1992.
- 2-Acetonyl-2-methyl-1:3-benzdithiole** (HURTLEY and SMILES), 2267.
- Acetophenone semicarbazones** (BAIRD and WILSON), 2373.
- Acetophenone**, ω -amino-, benzoyl derivative, phenylhydrazine (ROBINSON and THORNLEY), 3144.
 ω :4-*di*hydroxy-, acetyl derivatives (NOLAN, PRATT, and ROBINSON), 1969.
- Acetophenone-*o*-carboxylic acid**, methyl ester (RULE and SMITH), 553.
- Aceto-*m*-toluidide**, 2:6-dichloro-4-nitro-, and its benzoyl derivative, and 2:6-dichloro-4-nitrochloro- (DAVIES and LEEPER), 1416.
- 3-Acetoxymercuri-5-isoamylbenzaldehyde**, 2-hydroxy- (HENRY and SHARP), 2438.
- 2-Acetoxymercuri-*p*-isoamylphenol** (HENRY and SHARP), 2436.
- 3-Acetoxymercuri-5-*tert.*-butylbenzaldehyde**, 2-hydroxy- (HENRY and SHARP), 2437.
- 2-Acetoxymercuri-*p*-*tert.*-butylphenol** (HENRY and SHARP), 2435.
- Acetoxymercuricarvacrol** (HENRY and SHARP), 2436.

- 3-Acetoxymercuri-4-hydroxy-2-methyl-5-isopropylbenzaldehyde (HENRY and SHARP), 2439.
- 5-Acetoxymercuri-3-methyl-6-isopropylbenzaldehyde, 4-hydroxy- (HENRY and SHARP), 2439.
- Acetylacetone, absorption spectra of (MORTON and ROSNEY), 706.
- Acetyl-1:2:3-benzotriazole (BELL and KENYON), 954.
- Acetyl-*o*-benzylideneaminophenol, and its hydrolysis (BELL and KENYON), 1893.
- Acetylisocresol. See *p*-Tolyl methyl ether, 3-hydroxy-, acetyl derivative.
- 2-Acetyl-1:2-dihydrobenzthiazole, 5-bromo-1-imino-, and 1-imino-, and its bromides (HUNTER), 1394.
- N*-Acetyldiphenylamine-*p*-arsenious chloride (BURTON and GIBSON), 461.
- Acetylene, absorption of, by colloidal solutions (GATTERER), 299.
- δ-Acetylheptonic acid semicarbazone (KON and NUTLAND), 3108.
- 1-Acetylcyclohexane-1-acetic acid, and its derivatives (ROTHSTEIN and THORPE), 2016.
- 1-Acetylisatin, 5-iodo- (AESCHLIMANN), 2910.
- 2-Acetyl-2-methyl-1:3-benzdithiole (HURTTLEY and SMILES), 2267.
- Acetylmethylheptonic acids, semicarbazones of (KON and NUTLAND), 3109.
- 6-Acetyl-9-methyl-ψ-indoxylspirocyclopentane (MANJUNATH and PLANT), 2263.
- Acetyl-*o*-phenylenediamine, preparation of (BELL and KENYON), 954.
- Acid, C₇H₁₀O₄, and its derivatives, from methylation of ethyl isopropylidene-malonate (KON and SPEIGHT), 2730.
- C₉H₁₂O₄, and its derivatives, from methylation of ethyl cyclopentylidene-malonate (KON and SPEIGHT), 2732.
- C₁₀H₁₄O₄, and its ester, from methylation of ethyl Δ¹-cyclohexenylmalonate (KON and SPEIGHT), 2734.
- C₁₀H₁₆O₃, and its cyano-ester, from 2-isopropylidene-cyclopentanone and ethyl sodiocyanoacetate (KON and NUTLAND), 3108.
- C₁₁H₁₈O₃, from camphorphone and ethyl sodiocyanoacetate (KON and NUTLAND), 3109.
- Acids, aliphatic, derivatives of (WHITBY), 1458.
- fatty, crystal spacing in relation to length of chain in (PIPEL, MALKIN, and AUSTIN), 2310.
- Acids, fatty monobasic, heat of crystallisation of (GARNER, MADDEN, and RUSHBROOKE), 2491.
- saturated dicarboxylic, and their ethyl esters, X-ray structure of (NORMAND, ROSS, and HENDERSON), 2632.
- weak, and their salts, catalysis of the reaction between acetone and iodine by (DAWSON and CARTER), 2282.
- Additive reactions and tautomerism (COOPER, C. K. and E. H. INGOLD), 1868.
- Address, presidential (CROSSLEY), 978.
- Adsorption, optical study of (FODOR and RIWLIN), 102; (RIWLIN), 2300.
- Affinity, residual, and co-ordination (MORGAN and SMITH), 912; (MORGAN and BURSTALL), 2018; (MORGAN, CARTER, and HARRISON), 2027.
- Air. See Atmospheric air.
- Alanine, butyl esters, and their salts (MORGAN), 82.
- dl*-Alanine, resolution of (KIPPING and POPE), 494.
- Alcohol, C₂₆H₅₄O, and its acetate, from oxidation of paraffin wax (FRANCIS and GAUNTLETT), 2381.
- C₂₈H₅₈O, and its acetate, from oxidation of paraffin wax (FRANCIS and GAUNTLETT), 2381.
- Alcohols, temperature of maximum density of aqueous mixtures of (McHUTCHISON), 1898.
- of the hydroaromatic and terpene series (GOUGH, HUNTER, and KENYON), 2052.
- polyhydric, partial esterification of (FAIRBOURNE and FOSTER), 3146, 3147.
- Alcoholates, dissociation pressures of (BONNELL and JONES), 319.
- Aldehydes, condensation of piperitone with (EARL and READ), 2072.
- Aldehydodiphenyl, 4-hydroxy-, and its phenylhydrazone (BELL and KENYON), 3047.
- Aldoximes, isomeric, dissociation constants of (BRADY and GOLDSTEIN), 1918.
- methylation of (BRADY and GOLDSTEIN), 2403.
- Beckmann rearrangement of *N*-methyl ethers of (BRADY and DUNN), 2411.
- Alicyclic compounds, formation and stability of (FARMER and ROSS), 3233.
- Aliphatic compounds, higher, synthesis of (G. M. and R. ROBINSON), 2204.

- Alkali azides and cyanates**, comparison of the physical properties of (CRANSTON and LIVINGSTONE), 501.
bromides, equilibria of ethyl alcohol with (BONNELL and JONES), 318.
- Alkaline earth bromides and iodides**, equilibria of ethyl alcohol with (BONNELL and JONES), 318.
salts, action of superheated steam on (ROBINSON, SMITH, and BRISCOE), 836.
- Alkaloids of the phenanthrene group**, syntheses of (ROBINSON and SHINODA), 1987.
- Alkyl iodides**, reaction of sodium benzyl oxide with (GOLDSWORTHY), 1102.
- Alkylation** by means of thallium compounds (FEAR and MENZIES), 937.
- β -Alkylcinnamic acids**, isomerism of (JOHNSON and KON), 2748.
- Alkylphenols**, and their aldehydes, mercuration of (HENRY and SHARP), 2432.
- Allyl esters**, oxidation of, to α -glycerides (FAIRBOURNE and FOSTER), 3146.
2:4:6-trinitrophenyl ether (FAIRBOURNE and FOSTER), 3148.
- Allyl- Δ^1 -cyclohexenylacetone semicarbazonone** (KON and SMITH), 1797.
- Aluminium**, periodic passivity of (HEDGES), 2878.
- Amidines**, tautomerism of (FORSYTH and PYMAN), 2502.
N-alkylated (SEN and RAY), 646.
- Amines**, Gabriel synthesis of (ING and MANSKE), 2348.
- Amino-acids**, butyl esters of (MORGAN), 79.
- Amino-alcohols**, tertiary, elimination of amino-groups from (MCKENZIE, ROGER, and WILLS), 779.
- Amino-compounds**, aromatic, Tesla-luminescence spectra of (MCVICKER, MARSH, and STEWART), 17.
- Ammonium perchlorides**, quaternary (READE), 2528.
nitrite, decomposition of aqueous solutions of, by light (HOLMES), 1898.
sulphide, oxidation of (APPLEBEY and LANYON), 2983.
- 1-Amylaminobenzthiazoles**, and their dibromide hydrobromides (HUNTER), 2956.
- 1-Amylaminobenzthiazoles**, 5-bromo-, and their bromides (HUNTER and SOYKA), 2963.
- 2-Amylamino- β -naphthathiazoles**, and their bromides (DYSON, HUNTER, and SOYKA), 2968.
- 5-isoAmylbenzaldehyde**, 2-hydroxy-, and its derivatives (HENRY and SHARP), 2437.
- Analysis**, microchemical (HARTUNG), 840.
- Anhydro-5-amino-2- $\beta\beta\beta$ -trichloro- α -hydroxyethoxy-1- $\beta\beta\beta$ -trichloro- α -hydroxyethylbenzene**, and its derivatives (CHATTAWAY), 2725.
- Anhydro-2- $\beta\beta\beta$ -trichloro- α -hydroxyethoxy-1- $\beta\beta\beta$ -trichloro- α -hydroxyethylbenzene** (CHATTAWAY), 2726.
- Anhydrocotarnine-2:4-diaminotoluene**, and its diacetyl derivative (ROBINSON and WEST), 1935.
- Anhydrocotarnine-2-nitro-4-amino-3-methoxytoluene**, and its acetyl derivative (ROBINSON and SHINODA), 1991.
- Anhydrocotarnine-2:6-dinitrohomoveratrole** (GRAESSER-THOMAS, GULLAND, and ROBINSON), 1976.
- Anhydrocotarnine-2:4-dinitro-3-methoxytoluene**, and its hydrochloride (ROBINSON and WEST), 1986.
- Anhydrodihydrocryptopine oxide**, and its hydrochloride (HAWORTH and PERKIN), 1779.
- Anhydrodihydroprotopine**, and its oxide (HAWORTH and PERKIN), 1782.
- Anhydrodrastinine-2:4:6-trinitrotoluene**, and its hydrochloride (ROBINSON and WEST), 1987.
- Anhydrolaudaline-2:4-diamino-3-methoxytoluene**, and its dihydrochloride and acetyl derivative (ROBINSON and SHINODA), 1990.
- Anhydrolaudaline-2-nitro-4-amino-3-methoxytoluene**, and its derivatives (ROBINSON and SHINODA), 1990.
- Anhydrolaudaline-2:4-dinitro-3-methoxytoluene**, and its hydrochloride (ROBINSON and SHINODA), 1990.
- Anhydro-5-nitro-2- $\beta\beta\beta$ -trichloro- α -hydroxyethoxy-1- $\beta\beta\beta$ -trichloro- α -hydroxyethylbenzene** (CHATTAWAY), 2722.
- Anhydrotetrahydromethylberberine oxide**, and its hydrochloride (HAWORTH and PERKIN), 449.
- Aniline**, chloro-derivatives, preparation of (DYSON, GEORGE, and HUNTER), 3043.
- Anilines**, chloro-substituted, action of thiocarbonyl chloride on (DYSON, GEORGE, and HUNTER), 3041.
- 4'-Anilindiphenyl**, bromo- and chloro-dinitro- (LE FÈVRE and TURNER), 2047.
- β -Anilino- β -methylpentan- δ -one**, β -*p*-chloro-, and its derivatives (BANFIELD and KENYON), 1623.

- 4-Anilino-2-phenyldimethylpyrimidin-ium salts** (FORSYTH and PYMAN), 2508.
- o*-**Anisidine**, 3- and 6-nitro- (C. K. and E. H. INGOLD), 1318.
- Anisidines**, chloro- (HODGSON and HANDLEY), 542.
- Anisidine methyl thioethers**, and their hydrochlorides (HODGSON and HANDLEY), 544.
- Anisole**, *o*-fluoro-, and its nitro-derivatives (HOLMES and INGOLD), 1329.
- 5-halogeno-3-hydroxy-derivatives, and their derivatives (HODGSON and WIGNALL), 2826.
- Anisole-2-sulphinic acids**, nitro- (HOLMES, C. K. and E. H. INGOLD), 1688.
- ω*-**Anisoyl-3:4-dimethoxyacetophenone** (BRADLEY and ROBINSON), 2366.
- α*-**Anisoylpropiofenone**, and its copper derivative (BRADLEY and ROBINSON), 2360.
- Anisolidene-*dl*-piperitone** (EARL and READ), 2073.
- p*-**Anisytelluritrichloride** (MORGAN and KELLETT), 1084.
- Annual General Meeting**, 962.
- Anodes**, deposition of zinc on, in voltaic cells (HUMBY and PERRIN), 959.
- cadmium, lead, magnesium, mercury, platinum, tin, and zinc, periodic phenomena at (HEDGES), 2581.
- copper and silver, periodic phenomena at (HEDGES), 1533.
- Anthocyanins**, synthesis of (ROBERTSON and ROBINSON), 1713.
- Anthracene**, and its derivatives, absorption spectra of (CAPPER and MARSH), 724.
- Anthracenes**, *meso*-substituted (INGOLD and MARSHALL), 3080.
- reactivity of (COOK), 1282, 1677, 2160.
- Anthragallol**, acetyl derivatives (GREEN), 2202.
- 9-Anthranyl acetates**, 1- and 4-chloro- (MATTHEWS), 241.
- Anthranyl-9-pyridinium chloride**, 10-hydroxy- (MATTHEWS), 243.
- Anthraphenone**, 10-bromo-, -chloro-, and -nitro- (COOK), 1285.
- Anthrapurpurin**, acetyl and benzoyl derivatives (GREEN), 2200.
- Anthraquinone**, 1-chloro-4-hydroxy-, and its 4-acetyl derivative (GREEN), 1434.
- 5-chloro-1-hydroxy-, and its acetyl derivative (GREEN), 2199, 2203.
- 10-chloro-1-hydroxy-, and its derivatives (GREEN) 1431.
- Anthraquinones**, hydroxy-, action of thionyl chloride on (GREEN), 1428, 2198.
- Anthrone**, 10-*mono*- and 4:10-*di*-chloro-, chlorobromo-, and chlorohydroxy- (MATTHEWS), 241.
- meso*-**Anthrones**, hydroxy-, reactions of (MATTHEWS), 236.
- Antimony trichloride**, action of, on diazotised diamines (GRAY), 3174.
- d*-**Arabinose**, oxidation of (MCOWAN), 1747.
- Aromatic compounds**, substitution in (DAVIES and LEEPER), 1413; (FLÜRSCHHEIM and HOLMES), 1562.
- directive power of groups in substitution in (ALLAN and ROBINSON), 376; (OXFORD and ROBINSON), 383; (ROBINSON and SMITH), 392; (ALLAN, OXFORD, ROBINSON, and SMITH), 401; (LEA and ROBINSON), 411; (HOLMES, C. K. and E. H. INGOLD), 1684.
- mercuration of (COFFEY), 637, 3215.
- introduction of selenocyno-groups into (CHALLENGER, PETERS, and HALÉVY), 1648.
- polynuclear, molecular configuration of (CHRISTIE and KENNER), 470; (CHRISTIE, HOLDERNESS, and KENNER), 671.
- Arsenic compounds**, reduction of, by sodium hyposulphite (FARMER and FIRTH), 119.
- Arsenites**, action of, on halogenated organic compounds (BALABAN), 569.
- Arsenic subsulphide** (FARMER and FIRTH), 119.
- Arsenobenzene**, 4-amino-, 3'-amino-benzene- and -toluene-sulphonyl derivatives (HEWITT, KING, and MURCH), 1362.
- 5:5'-*di*iodo-3:3'-*di*amino-4:4'-*di*hydroxy-, diacetyl derivative, and 5:5'-*di*iodo-3:3'-*di*nitro-4:4'-*di*hydroxy- (MACALLUM), 1646.
- thiol- (HEWITT, KING, and MURCH), 1370.
- Arsenobenzenes**, aminohydroxy-, amino-aryl derivatives of (HEWITT and KING), 827.
- Aryl alkyl ethers**, reactions of tellurium tetrachloride and (MORGAN and KELLETT), 1080.
- disulphoxides*, amino-, phototropic (CHILD and SMILES), 2696.
- Arylsulphuric acids** (BURKHARDT and LAFWORTH), 684.
- Atmospheric air**, propagation of flame in mixtures of methane and (CHAPMAN and WHEELER), 2139.

- Atomic weight** of boron (BRISCOE, ROBINSON, and STEPHENSON), 70.
of silicon (ROBINSON and SMITH), 1262.
of silver (RILEY and BAKER), 2510.
- Aurous oxide.** See under Gold.
- Azelaic acid, $\alpha\alpha'$ -dihydroxy-**, and its silver salt and ethyl ester (GOSS and INGOLD), 1476.
- Azides**, comparison of the physical properties of cyanates and (CRANSTON and LIVINGSTONE), 501.
- Azobenzaldehydes**, preparation of (DUTT), 1172.
- Azobenzthiazole**, 1-amino-, and its hydrochloride (HUNTER), 1396.
- Azodicarboxymethylamide** (COOPER and INGOLD), 1895.
- p*-Azoxybenzyl alcohol** (SHOESMITH and TAYLOR), 2834.
- Azoxybenzyl bromides**, isomeric. preparation and hydrolysis of (SHOESMITH and TAYLOR), 2832.
- B.**
- Balance**, micro-. See Micro-balance.
- Balance sheets** of the Chemical Society and Research Fund. See Annual General Meeting, 962.
- Barbituric acid**, bromo- and chloro-, hydrazides of (MACBETH, NUNAN, and TRAILL), 1251.
- Barium chloride and nitrate**, equilibria of sodium chloride and nitrate with (FINDLAY and CRUICKSHANK), 316.
germanate (PUGH), 2831.
iodide, solubility of, in water (PACKER and RIVETT), 1061.
- Base, $C_{12}H_{19}ON$** , and its derivatives, from reduction of $C_{18}H_{22}O_2N_2$ (BANFIELD and KENYON), 1623.
- Bases**, heterocyclic, reactive methyl groups in (HUMPHRIES), 374.
organic, action of acetylene tetra-bromide on (FULTON), 197.
- Benzaldehyde**, 2-chloro-5-amino-, and chloro-*m*-hydroxy-derivatives, and their derivatives (HODGSON and BEARD), 147.
chloronitro-3-hydroxy-derivatives, and their salts and derivatives (HODGSON and BEARD), 2031.
m-nitro-, condensation of quinaldine with (TAYLOR and WOODHOUSE), 2971.
- Benzaldehydes**, chloro-3-hydroxy-, nitration of (HODGSON and BEARD), 2030.
fluoro-, and their derivatives (SHOESMITH, SOSSON, and SLATER), 2760.
- Benzamidines**, nitration of (FORSYTH, NIMKAR, and PYMAN), 800.
- 1:4-Benzdithian-2:3-dione** (HURTLEY and SMILES), 2268.
- 1:3-Benzdithiole**, 2-oximino-, and 2-thio- (HURTLEY and SMILES), 1826.
- 1:3-Benzdithiol-2-one**, and nitro- (HURTLEY and SMILES), 1826.
- 1:3-Benzdithylium salts** (HURTLEY and SMILES), 2267.
- Benzene nucleus**, structure of (INGOLD and MARSHALL), 3080.
formation of rings attached to (TITLEY), 508.
vapour pressure of (JOLLY and BRISCOE), 2156.
derivatives, vicinal trisubstituted, substitution in (RUBENSTEIN), 648.
- Benzene**, chloronitro-, action of alcoholic potassium hydroxide on (RICHARDSON), 522.
o-dithiol- (HURTLEY and SMILES), 1821.
- p*-Benzeneazo-*p*'*p*'-diaminotriphenylmethane**, and *p*-4-hydroxy- (DUTT), 1175.
- Benzeneazobenzeneazobenzeneazoaniline** (DUTT), 1177.
- Benzeneazobenzeneazobenzeneazobenzeneazodimethylaniline** (DUTT), 1178.
- Benzeneazobenzeneazobenzeneazobenzeneazophenol** (DUTT), 1178.
- Benzeneazobenzeneazobenzeneazodimethylaniline** (DUTT), 1177.
- Benzeneazobenzeneazobenzeneazophenol** (DUTT), 1177.
- Benzene-1-azo- β -naphthaquinone-1-sulphonic acid**, 4'-nitro-, sodium salt (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 699.
- Benzenediazonium chloride**, *p*-amino-, acetyl derivative, and its derivatives (GRAY), 3178.
- Benzene-*o*-dimethylsulphone** (HURTLEY and SMILES), 1825.
- Benzene-*o*-disulphonic acid**, salts and derivatives of (HURTLEY and SMILES), 1823.
- Benzenesulphonic acid**, beryllium salt (SIDGWICK and LEWIS), 1290.
- Benzenesulphonic acid**, *p*-amino-, acetyl derivative, *p*-acetylaminophenyl ester (CHILD and SMILES), 2699.
- Benzenethiolsulphonic acid**, *p*-amino-, acetyl derivative, *p*-tolyl ester (CHILD and SMILES), 2702.
- Benzyltrimethylamidinium nitrate**, and *m*-nitro-, hydriodide (FORSYTH, NIMKAR and PYMAN), 803.
- Benzfuroin** (GREENE), 331.

- Benzidines**, *dinitro*-, and their diacetyl and dipiperidino-derivatives (LE FEVRE and TURNER), 1762.
- Benzil**, *oo'*-, *om'*-, and *mm'*-*dinitro*-(CHATTAWAY and COULSON), 1070.
- 2:4-*dinitro*-, oximes (BISHOP and BRADY), 810.
- 3:5:3':5'-*tetranitro*-, and its quin-oxaline derivative (CHRISTIE and KENNER), 475.
- Benziminazole 2-thioglycollic acid**, esters and lactam (STEPHEN and WILSON), 2536.
- Benzoic acid**, ethyl ester, chloro- and methoxy-derivatives, velocity of saponification of (BLAKEY, MCCOMBIE, and SCARBOROUGH), 2863.
- Benzoic acid**, 3-amino-4-hydroxy-, *N*-4-tolu-nesulphonyl derivative (HEWITT, KING, and MURCH), 1368.
- 3-bromo-2-amino-, acetyl derivative (BURTON, HAMMOND, and KENNER), 1803.
- 3-bromonitro-, ethyl ester (BURTON, HAMMOND, and KENNER), 1804.
- p*-nitro-, and 3:5-*dinitro*-, allyl esters and their dibromo-derivatives (FAIRBOURNE and FOSTER), 3147.
- Benzoic acids**, nitro-, *sec.*- β -octyl esters of, and their rotation (RULE and NUMBERS), 2116.
- Benzomethylamide**, *o*-nitro- (BRADY and DUNN), 2415.
- Benzophenones**, hydroxy-, preparation of (ATKINSON and HEILBRON), 2688.
- methoxylated, fission of (LEA and ROBINSON), 2351.
- Benzopyrylium salts**, synthesis of (PERKIN, RÅV, and ROBINSON), 941.
- Benzoxazole methiodide** (CLARK), 233.
- ω -**Benzoylacetophenones**, chloro- and nitro-, and their copper derivatives (BRADLEY and ROBINSON), 2363.
- α -**Benzoylcamphor**, absorption spectra of (MORTON and ROSNEY), 708.
- Benzoyldi-*p*-tolylamine**, tri- (CHAPMAN), 2298.
- Benzoylfurfuraldehydecyanohydrin** (GREENE), 330.
- Benzoylfuroin** (GREENE), 331.
- o*-**Benzoylmethylaminoanisole** (CLARK), 235.
- o*-**Benzoylmethylaminophenylurethane** (CLARK), 235.
- ω -**Benzoyloxyphloracetophenone**, and its triacetyl derivative (HEAP and ROBINSON), 2340.
- ω -**Benzoyloxyresacetophenone**, and its diacetyl derivative (HEAP and ROBINSON), 2338.
- 2-Benzoyl-2-phenyl-1:3-benzdithiole** (HURTLEY and SMILES), 2267.
- 2-Benzoyl-2-phenyl-1:3-dithiolan** (HURTLEY and SMILES), 2267.
- Benzoylanillic acid**, and its derivatives (HEAP and ROBINSON), 2341.
- Benzthiazole**, 1-amino-, acetyl and benzoyl derivatives, and their bromides (HUNTER), 1395.
- amino- and bromoamino-derivatives, and their derivatives (HUNTER), 1397.
- Benzthiazoles**, amino- (HUNTER), 1385, 1401, 2951; (HUNTER and SOVKA), 2953; (DYSON, HUNTER, and SOVKA), 2964.
- Benzthiazole-1-azo- β -naphthol** (HUNTER), 1396.
- Benzyl bromides**, bromo-, chloro-, and fluoro- (SHOESMITH and SLATER), 214.
- iodides, bromo- (SHOESMITH and SLATER), 219.
- Benzylacetone**, δ -anilino- and δ -methyl-anilino-semicarbazones and *p*-tolyl-hydrazone (BAIRD and WILSON), 2373.
- Benzylamine**, nitration of, and its derivatives (ING and ROBINSON), 1655; (GOSS, INGOLD, and WILSON), 2440.
- 3-Benzylaminotoluene**, 2:4-*dinitro*-(GORNALL and ROBINSON), 1984.
- Benzylammonium picrates**, nitro- (GOSS, INGOLD, and WILSON), 2455.
- 9-Benzylanthracene**, bromo-derivatives, and 10-chloro- and 10-nitro- (COOK), 2166.
- 9-Benzylanthranlyl 10-acetate** (COOK), 2165.
- 9-Benzylanthranlyl-10-pyridinium bromide** (COOK), 2167.
- 10-Benzylanthraphenone** (COOK), 2169.
- d*- and *l*-**Benzyldeoxybenzoin** (MCKENZIE, ROGER, and WILLS), 788.
- 9-Benzyl-9:10-dihydroanthracene**, 9-hydroxy-10-nitro- (COOK), 2168.
- 10-Benzyl-9:10-dihydroanthraphenone** (COOK), 2170.
- 9-Benzyl-9:10-dihydroanthraquinyl-9:10-dipyridinium dibromide** (COOK), 2167.
- Benzyl-diethylamine**, nitration of (FLÜRSCHREIM and HOLMES), 1567.
- Benzyl-dimethylamine**, *m*-nitro- (GOSS, INGOLD, and WILSON), 2454.
- Benzyl-dimethylarsine**, derivatives of (ROBERTS, TURNER, and BURY), 1445.
- Benzylethyl-dibutylstannane** (LAW), 3243.
- Benzylideneacetyl- β -propylidenebenzidine**, *p*-nitro- (DENNETT and TURNER), 481.
- 4-Benzylideneaminodiphenyl** (BELL and KENYON), 2707.

- 4-Benzylideneamino-4'-hydroxydiphenyl** (BELL and KENYON), 2712.
- Benzylideneanthrone dibromide** (COOK), 2171.
- Benzylidenesalicylidenebenzidine, p-nitro-** (DENNETT and TURNER), 481.
- Benzyl methyl ketone**, condensation of, with salicylaldehyde (DICKINSON), 2234.
- Benzyl oxide**, sodium, reactions of, with alkyl iodides (GOLDSWORTHY), 1102.
- 2-Benzylloxylanisole**, nitro-derivatives (ALLAN and ROBINSON), 382; (OXFORD and ROBINSON), 386.
- 4-Benzylloxylanisole**, nitro-derivatives (ROBINSON and SMITH), 399.
- 10-Benzyloxy-5:10-dihydrophenarsazine** (BURTON and GIBSON), 464.
- 4-Benzyl-2-pyridone**, 3:5-dicyano-6-hydroxy-, and its ammonium salt (LINSTAD and WILLIAMS), 2747.
- 1-Benzyltetrahydroisoquinoline**, derivatives of (ROBINSON and WEST), 1985.
- Benzyltriethylammonium picrate**, and nitro-derivatives (GOSS, INGOLD, and WILSON), 2450.
- Benzyltrimethylammonium salts**, and nitro- (ING and ROBINSON), 1666.
- Berberine**, conversion of, into β -homochelidonium (HAWORTH and PERKIN), 445.
- Beryllium compounds**, co-ordination, optical activity of (MILLS and GOTTS), 3121.
- Beryllium oxide**, solubility of, in solutions of its salts (SIDGWICK and LEWIS), 1287.
- Beryllium organic compounds**:— salts, conductivities of (SIDGWICK and LEWIS), 2538.
- Beryllibenzoilpyruvic acid**, salts of, and their resolution (MILLS and GOTTS), 3126.
- Bis-triaminopropanecobaltic salts** (MANN and POPE), 2578.
- Bis-triaminopropanecupric salts** (MANN), 2686.
- Bis-triaminopropanenickelous salts** (MANN and POPE), 2680.
- Bis-p-anisyl tellurides** (MORGAN and KELLETT), 1084, 1085.
- 2:2'-Bis-1:3-benzdithiolene**, and tetraiodo- (HURTLEY and SMILES), 2253.
- 2:2'-Bis-1:3-benzdithylium sulphate** (HURTLEY and SMILES), 2269.
- Bis-2:5-dichlorophenylthiophenylacetic acid**, ethyl ester, and nitrile (BROOKER and SMILES), 1726.
- Bis-dibenzyl ketone thiocarbonylhydrazone** (STEPHEN and WILSON), 2537.
- 10:10'-Bis-5:10-dihydrophenarsazine**, and its acetyl derivative (BURTON and GIBSON), 2246.
- Bis-p-dimethylaminobenzylidene pentaerythritol methiodide** (FAIRBOURNE and WOODLEY), 3241.
- Bisdiphenylene-ethylene**, absorption spectrum of (CAPPER and MARSH), 725.
- Bisethylenediamminocupric iodides**, mono- and di-hydrated, thermal properties of (MORGAN, CARTER, and HARRISON), 2030.
- Bismethanolbisethylenediamminocupric cyanate tetrahydrate** (MORGAN and BURSTALL), 2027.
- Bis-2-methoxy-m-tolyl ditelluride** (MORGAN and KELLETT), 1086.
- 2:3 9:10-Bismethylenedioxyanhydroprotoberberine-acetone** (HAWORTH and PERKIN), 1784.
- 2:3:9:10-Bismethylenedioxydihydroprotoberberine**, and its hydrochloride (HAWORTH and PERKIN), 1783.
- 2:3:9:10-Bismethylenedioxyoxyprotoberberine** (HAWORTH and PERKIN), 1780.
- 2:3:9:10-Bismethylenedioxyprotoberberinium chloride** (HAWORTH and PERKIN), 1783.
- 2:3:9:10-Bismethylenedioxytetrahydroprotoberberine**, and its hydrochloride (HAWORTH and PERKIN), 1780.
- Bistetramethylaminodiphenylcarbinol diacetate** (DUTT), 1178.
- Bistetramethylaminodiphenylmethane** (DUTT), 1178.
- Boiling points** of higher aliphatic hydrocarbons (FRANCIS and WOOD), 1420.
- Boron**, atomic weight of (BRISCOE, ROBINSON, and STEPHENSON), 70. trioxide glass, density of (BRISCOE, ROBINSON, and STEPHENSON), 70.
- Boric acid**, fractional crystallisation of, and the density of boric oxide therefrom (BRISCOE, ROBINSON, and STEPHENSON), 954.
- Borates**, basic, electrometric precipitation of (BRITTON), 136.
- Brass**, formation of oxide films on (VERNON), 2273.
- Brazilin**, synthesis of, and its derivatives (PERKIN, RAY, and ROBINSON), 941.
- Bromine**, light absorption of wet and dry (LEWIS and RIDEAL), 596.
- Budde effect** in (LEWIS and RIDEAL), 583, 596.
- wet, photoactive constituent of (LEWIS and RIDEAL), 583.
- vapour pressure of (JOLLY and BRISCOE), 2158.

- Bromine**, reaction of ethylene with (NORRISH and JONES), 55.
- Budde effect** in bromine (LEWIS and RIDEAL), 583, 593.
- Butane- $\alpha\beta\gamma$ -tetracarboxamide** (INGOLD and SHOPPEE), 1917.
- Butylnaphthalenes**, γ -oximino- (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2258.
- 2-Butoxyanisoles**, nitro-derivatives (ALLAN and ROBINSON), 381.
- 10-n-Butoxy-5:10-dihydrophenarsazine** (BURTON and GIBSON), 464.
- 1-Butylaminobenzthiazoles**, and their bromides (HUNTER), 2955.
- 1-Butylaminobenzthiazoles**, 5-bromo-, and their dibromides (HUNTER and SOYKA), 2962.
- 2-Butylamino- β -naphthathiazoles**, and their bromides (DYSON, HUNTER, and SOYKA), 2967.
- 5-tert.-Butylbenzaldehyde**, 2-hydroxy-, phenylhydrazone (HENRY and SHARP), 2437.
- d-sec-Butylbenzene**, preparation and rotation of, and its derivatives (HARRISON, KENYON, and SHEPHERD), 658.
- Butyl- Δ^1 -cyclohexenylacetone** semicarbazone (KON and SMITH), 1797.
- sec-Butylisovaleryllactic acid**, ethyl ester (JONES), 2769.
- Butyrylcarbamide**, α -bromo- (PHILLIPS), 2981.
- C.**
- Cade oil**, sesquiterpene from (HENDERSON and ROBERTSON), 2813.
- Cadinene**, chemistry of (HENDERSON and ROBERTSON), 2811.
- action of chromic acid and of chromyl chloride on (GIBSON, ROBERTSON, and SWORD), 166.
- Cadmium sulphide**, precipitation of, in presence of hydrochloric acid and chlorides (KRISHNAMURTI), 1549.
- Cadmium anodes**. See under Anodes.
- Calcium carbonate hexahydrate**, density of (HUME and TOPLEY), 2932.
- sulphate, precipitated (LAMBERT and SCHAFFER), 2648.
- Camphane series**, studies in (FORSTER and RAO), 2670.
- Camphor**, absorption spectra of halogen and sulphonic derivatives of (LOWRY and OWEN), 606.
- Camphor**, ζ -nitroso-, unstable form of (FORSTER and RAO), 2670.
- thiol-, metallic derivatives of (DRUMMOND and GIBSON), 3075.
- Camphor series**, melting-point curves of isomerides in (ROSS and SOMERVILLE), 2770.
- d-Camphoramic acid**, rotation of aryl derivatives of (SINGH and PURI), 504.
- d-Camphorimide**, rotation of aryl derivatives of (SINGH and PURI), 504.
- Caoutchouc**, from *Hevea brasiliensis*, resin of (WHITBY, DOLID, and YORSTON), 1448.
- Carbamidoacetic acid**, *n*-butyl ester (MORGAN), 81.
- Carbamyl chlorides**, substituted, decomposition of, by hydroxy-compounds (PRICE), 653, 3230.
- Carbamylcyclohexanecarboxylic acids**, and their esters (WIGHTMAN), 2543.
- Carbazole**, 3-*mono*- and 3:6-*di*-iodo-, and their 9-acetyl, 9-benzoyl, and 9-toluene-*p*-sulphonyl derivatives (TUCKER), 547.
- Carbazoles**, synthesis of (OAKSHOTT and PLANT), 1210.
- Carbazole series**, iodination in (TUCKER), 546.
- 5-Carbethoxyanilinosemicarbazide** hydrochloride, and its benzylidene derivative (BAIRD and WILSON), 2375.
- 3-o-Carbethoxybenzylacetylacetone**, and its copper derivative (MORGAN and PORTER), 1262.
- 3-m-Carbethoxybenzylacetylacetone**, and its copper derivative (MORGAN and PORTER), 1258.
- 3-m-Carbethoxybenzylbutyrylacetone**, and its copper derivative (MORGAN and PORTER), 1260.
- ω -4-Carbethoxy-2-ketocyclopentyl-methylsuccinic acid**, ethyl ester, and its semicarbazone (INGOLD and SHOPPEE), 1917.
- 2-Carbethoxy-7-methoxyindole-3-acetic acid**, ethyl ester (PERRIN and RUBENSTEIN), 362.
- Carbon chains**, alternating effect in (HOLMES and INGOLD), 1305, 1328; (C. K. and E. H. INGOLD), 1310; (HOLMES, C. K. and E. H. INGOLD), 1684; (GOSS, INGOLD, and WILSON), 2440; (BAKER and INGOLD), 2462.
- rings, influence of, on the velocity of reactions involving side-chains (GANE and INGOLD), 10.
- Carbon monoxide**, catalytic dissociation of (CLEMINSON and BRISCOE), 2148.
- ignition of mixtures of hydrogen and (CAMPBELL and WOODHEAD), 3010.
- dioxide, absorption of, by colloidal solutions (GATTERER), 299.
- Carbonates**, basic, electrometric precipitation of (BRITTON), 142.

- Carbon *disulphide*, flame spectra of (EMELEUS), 2948.
- Carbonylbenzidine, and its derivatives (LE FÈVRE and TURNER), 2483.
- 3-*m*-Carboxybenzylacetone (MORGAN and PORTER), 1261.
- 3-*m*-Carboxybenzylacetylacetone, and its copper derivatives (MORGAN and PORTER), 1259.
- 3-*m*-Carboxybenzylbutyrylacetone, and its beryllium and copper derivatives (MORGAN and PORTER), 1260.
- o*-Carboxycinnamionitrile (EDWARDS), 816.
- β -(2-Carboxydimethoxyphenyl)ethylamines, β -hydroxy-, and their lactones, salts and derivatives of (EDWARDS), 745.
- β -(2-Carboxydimethoxyphenyl)ethylcarbamic acids, β -hydroxy-, ethyl ester, lactones (EDWARDS), 746.
- β -(2-Carboxydimethoxyphenyl)ethylmethylamines, β -hydroxy-, and their lactones, salts and derivatives of (EDWARDS), 747.
- 1-Carboxycyclohexane-1-acetic acid, preparation of, and its anhydride (ROTHSTEIN and THORPE), 2015.
- cis*-*o*-Carboxycyclohexaneacetic acid, preparation of (KON and QUDRAT-I-KHUDA), 3071.
- o*-Carboxy- α -hydroxycinnamic acid *p*-nitrophenylhydrazide (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 705.
- β -(2-Carboxy-3:4-*di*hydroxyphenyl)ethylamine, β -hydroxy-, and its hydrochloride (EDWARDS), 746.
- α - and ω -4-Carboxy-2-ketocyclopentylmethylsuccinic acids (INGOLD and SHOPPEE), 1916.
- 2-Carboxy-5- and -7-methoxyindole-3-acetic acids (PERKIN and RUBENSTEIN), 361.
- m*-Carboxyphenyl methyl sulphoxide, preparation and resolution of (HARRISON, KENYON, and PHILLIPS), 2087.
- o*-Carboxyphenylethylamines, substituted (EDWARDS), 740.
- m*-Carboxyphenylsulphuric acid, potassium salt (BURKHARDT and LARWORTH), 689.
- Carone, catalytic hydrogenation of (IYER and SIMONSEN), 2049.
- β -Caryophyllene, action of chromyl chloride on (GIBSON, ROBERTSON, and SWORD), 165.
- Caryophyllene series (HENDERSON, ROBERTSON, and KERR), 62.
- Caryophyllene alcohol (HENDERSON, ROBERTSON, and KERR), 66.
- Caryophyllene glycol (HENDERSON, ROBERTSON, and KERR), 68.
- Caryophyllol, and its dibromide (HENDERSON, ROBERTSON, and KERR), 65.
- Catalytic reactions, acid and salt effects in (DAWSON and CARTER), 2282; (DAWSON and DEAN), 2872; (DAWSON and HOSKINS), 3166.
- Catechol. See Pyrocatechol.
- Cedrene, action of chromyl chloride on (GIBSON, ROBERTSON, and SWORD), 166.
- Cells, electrochemical, alternating-current (HEDGES), 1892.
- Cellulose, degradation of (IRVINE and ROBERTSON), 1488.
- Charcoal, low temperature oxidation with (RIDEAL and WRIGHT), 1813, 3182.
- blood, catalytic activity of (RIDEAL and WRIGHT), 3182.
- Chemical constitution. See under Constitution.
- Chloral, condensation of phenols with (CHATTAWAY), 2720.
- Chloral hydrate, effect of heat on (MOUNFIELD and WOOD), 498.
- Chlorine dioxide, vapour pressure of (KING and PARTINGTON), 925.
- Chloroauric acid. See under Gold.
- Chromium, removal of, from amalgams (RUSSELL, EVANS, and ROWELL), 1872.
- Chromium salts, reactions of, with sodium acetate, oxalate, and tartrate (BRITTON), 269.
- Chromic chloride hexahydrates, miscibility of dilute solutions of (HOWARD and PATTERSON), 2791.
- nitrate hydrates (PARTINGTON and TWEEDY), 1142.
- Chromyl chloride, oxidation of sesquiterpenes by (GIBSON, ROBERTSON, and SWORD), 164.
- Chromic acid, oxidation of sesquiterpenes by (GIBSON, ROBERTSON, and SWORD), 164.
- Chromates, basic, electrometric precipitation of (BRITTON), 125.
- Chrysin, synthesis of (ROBINSON and VENKATARAMAN), 2347.
- Chrysogen, absorption spectrum of (CAPPER and MARSH), 725.
- allo*Cinnamic acid, *o*-cyano-, preparation of (EDWARDS), 815.
- Cinnamic acids, and their amides, substituted derivatives of (HARRISON and WOOD), 1195.
- 7-Cinnamoyloxy-4'-methoxy-2-styryl-isoflavone, 5-hydroxy- (BAKER and ROBINSON), 2718.
- Citraconic acid, ethyl ester, action of ethyl sodiomalonate on (INGOLD and SHOPPEE), 1912.
- Coal, composition of (FRANCIS and WHEELER), 1410.

- Cobalt**, electro-deposition potential of (GLASSTONE), 2887.
 periodic passivity of (HEDGES), 2878.
 removal of, from amalgams (RUSSELL, EVANS, and ROWELL), 1872.
- Cobalt alloys** with iron and nickel, electro-deposition potentials of (GLASSTONE), 2897.
- Cobalt peroxide** as catalyst (CHIRNOAGA), 1695.
- Cobalt organic compounds**, complex, with oximes (TAYLOR and EWBank), 2818.
- Codeine**, oxidation of (CAHN and ROBINSON), 908.
- Colloids**, protective (SUGDEN and WILLIAMS), 2424.
- Colloidal solutions**, absorption of gases by (GATTERER), 299.
- Colour**, theory of (DUTT), 1171.
 and constitution (HODGSON and HANDLEY), 542.
- Colouring matters**. See Hæmoglobin.
- Compounds**, conjugated, properties of (FARMER and ROSS), 1570.
 sparingly soluble, determination of solubility of (MITCHELL), 1333.
- spiro-Compounds**, formation and stability of (ROTHSTEIN and THORPE), 2011.
- Conessine**, and its derivatives (KANGA, AYYAR, and SIMONSEN), 2123.
- apoConessine**, and its salts (KANGA, AYYAR, and SIMONSEN), 2125.
- Constitution**, chemical, and optical rotatory power (SINGH and PURI), 504; (HARRISON, KENYON, and SHEPHERD), 658; (DOMLEO and KENYON), 1841; (HARRISON, KENYON, and PHILLIPS), 2079.
 and colour (HODGSON and HANDLEY), 542.
 and trypanocidal action (HEWITT and KING), 817; (HEWITT, KING, and MURCH), 1355.
- Co-ordination and residual affinity** (MORGAN and SMITH), 912; (MORGAN and BURSTALL), 2018; (MORGAN, CARTER, and HARRISON), 2027.
- Copaene**, new source of (HENDERSON, M'NAB, and ROBERTSON), 3077.
- Copper**, formation of oxide films on (VERNON), 2273.
 action of sulphuric acid on (ROGERS), 254.
- Copper compounds**, co-ordination, optical activity of (MILLS and GOTTS), 3121.
- Copper hydrides**, and their crystal structure (MÜLLER and BRADLEY), 1669.
 sulphates, basic (FOWLES), 1845; (BRITTON), 2868.
- Copper organic compounds** :—
 with ethylenediamine (MORGAN and BURSTALL), 2018.
 complex, with oximes (TAYLOR and EWBank), 2818.
- Cupric compounds** with ethylenediaminobisacetylacetone (MORGAN and SMITH), 918.
- Copper anodes**. See under ANODES.
- Corrosion**, liquid-line (HEDGES), 831.
- Cosmetic**, Egyptian, from the tomb of Tut-ankh-Amen (CHAPMAN and PLENDERLEITH), 2614.
- isoCreosol**, and *dinitro*-, and their salts and derivatives (GRAESSER-THOMAS, GULLAND, and ROBINSON), 1972.
- 2-nitro-6-amino**-, and its acetyl derivative (GULLAND and ROBINSON), 1979.
- m-Cresol**, chloro-derivatives, and their derivatives (GIBSON), 1424.
- Cresols**, halogen derivatives, and their amino- and nitroso-derivatives (HODGSON and MOORE), 2036.
- Crotonic acid series** (PHILLIPS), 2979.
- Crotonylcarbamides** (PHILLIPS), 2981.
- Cryptopine**, synthesis of (HAWORTH and PERKIN), 1769.
- α -alloCryptopine**. See β -Homochelidone.
- Crystals**, structure of, in relation to length of chain in organic compounds (PIPER, MALKIN, and AUSTIN), 2310.
 variation of angles of, during growth (HEDGES), 791.
- Cubebol**, and its derivatives (HENDERSON and ROBERTSON), 2815.
- Cupribenzoylpyruvic acid**, strychnine salt (MILLS and GOTTS), 3130.
- Cyanogen** :—
Hydrocyanic acid, specific heat of (INGOLD), 26, 2816; (PARTINGTON), 1559.
 potassium salt, equilibria of formation of double salts of, with cadmium, mercury, nickel, and zinc cyanides (CORBET), 3190.
- Cyanates**, comparison of the physical properties of azides and (CRANSTON and LIVINGSTONE), 501.
- Cyclic compounds**, formation of, from halogenated open-chain derivatives (HASSELL and INGOLD), 1465; (GOSS and INGOLD), 1471.

D.

Decahydro- β -naphthamides (KAY and STUART), 3038.

- Dehydro-anhydrolaudaline-4-amino-3-methoxytoluene**, 4-acetyl derivative, methiodide (ROBINSON and SHINODA), 1994.
- Delphinidin chloride 3-methyl ether** (GATEWOOD and ROBINSON), 1959.
- Deoxytetrahydro- α -methylmorphimethine perchlorate** (CAHN), 2565.
- Dextrose**, structure of (CHARLTON, HAWORTH, and PEAT), 89; (HIRST), 350.
action of, on zirconium chloride solutions (BRITTON), 269.
- s-Di-5-acenaphthylcarbamide** (NAIR and SIMONSEN), 3143.
- Diacetophenonethiocarbohydrazone**, sodium derivative (STEPHEN and TURNER), 2537.
- 2:6-Diacetoxymercuri-*p*-isoamylphenol**, and its potassium salt (HENRY and SHARP), 2435.
- 2:6-Diacetoxymercuri-*p*-tert.-butylphenol** (HENRY and SHARP), 2434.
- Diacetoxymercuricarvacrol** (HENRY and SHARP), 2436.
- Di-(acetylaminobenzenediazonium chlorides)-antimony trichloride** (GRAY), 3177.
- Diacetylsuccinic acid**, ethyl ester, absorption spectra of (MORTON and ROGERS), 713.
- Diamines**, diazotised, action of antimony trichloride on (GRAY), 3174.
- 4:4'-Dianilindiphenyl**, 3:3'-*d*-nitro- (LE FEVRE and TURNER), 2048.
- 9:10-Dianilino-9:10-diphenyl-9:10-dihydroanthracene** (INGOLD and MARSHALL), 3083.
- 9:10-Di-*p*-anisylanthracene** (INGOLD and MARSHALL), 3086.
- 9:10-Di-*p*-anisyl-9:10-dihydroanthracene**, 9:10-*d*ihydroxy- (INGOLD and MARSHALL), 3086.
- Di-*p*-anisyltelluridichloride** (MORGAN and KELLETT), 1085.
- p*-Diazoinbenzena**, salts of (GRAY), 3178.
- 4-Diazomethylaminodiphenyl** (BELL, KENYON, and ROBINSON), 1246.
- 5-Diazo-3-propyl-1:2,4-triazoles**, chloroaurates of (REILLY and DRUMM), 1735.
- 9:10-Dibenzoyl-9:10-dihydroanthracene** (COOK), 1643.
- Dibenzylmethanes**, substituted, hydrolysis of (BRADLEY and ROBINSON), 2356.
- 10:10'-Dibenzoyl-9:9':10:10'-tetrahydro-9:9'-dianthranyl**, and its diacetate (COOK), 1630.
- 4:4'-Di-1''-2''-3''-benzotriazolylidiphenyl** (TUCKER), 3036.
- Dibenzyl**. See *s*-Diphénylethane.
- Dibenzylacetic acid**, methyl ester (HILL), 956.
- Dibenzylacetoacetic acid**, ethyl ester, reduction of (HILL), 956.
- Dibenzylidimethylammonium picrate** (GOSS, INGOLD, and WILSON), 2462.
- Dibenzylethylbutylstannane** (LAW), 3243.
- Dibenzyl ketone δ -anilinosemicarbazone** (BAIRD and WILSON), 2373.
- Dicarbazyls** (TUCKER), 3033.
- Dicarbathoxyaminodiphenyl** *p*-disulphide (CHILD and SMILES), 2698.
- Dicarbomethoxyaminodiphenyl** *p*-disulphoxide (CHILD and SMILES), 2698.
- Dicarbomethoxyarabinose carbonate** (HAWORTH and MAW), 1752.
- Dicarboxycyclopentenylmalonic acid**, ethyl ester (INGOLD, SHOPPEE, and THORPE), 1487.
- Dicarboxycyclopentylidenemalonic acid**, ethyl ester (INGOLD, SHOPPEE, and THORPE), 1487.
- $\beta\beta$ -Dicarboxysuberic acid** (INGOLD and SHOPPEE), 1917.
- dl*-Dicentrine**, resolution of (HAWORTH, PERKIN, and RANKIN), 29.
- Di-*o*-diphenylenesilicium** (WIDDOWSON), 958.
- Dielectric constants of mixed organic liquids** (KERR), 2796.
- 2:3-Diethoxybenzyl alcohol**, and 5-bromo- and 5-nitro- (RUBENSTEIN), 650.
- 2:3-Diethoxycinnamic acid**, and 5-nitro- (RUBENSTEIN), 652.
- Diethyl ketone δ -anilinosemicarbazone** (BAIRD and WILSON), 2371.
- Difluorescein** (DUTT), 1180.
- Dicyclohexylphenylarsine**, and its derivatives (ROBERTS, TURNER, and BURY), 1446.
- Dihomopiperonylamine**, *d*initro- (PERKIN, RAY, and ROBINSON), 948.
- Dihydroanthraphenone**, derivatives of (COOK), 1681.
- 9:10-Dihydroanthraphenone**, 9:10-*d*ichloro- and -*d*initro- (COOK), 1286.
- 7:12-Dihydrobenzophenarsazine**, 12-chloro- (BURTON and GIBSON), 2243.
- Dihydrocodeine**, *d*ihydroxy-, and its triacetyl derivative (CAHN and ROBINSON), 910.
- Dihydrodeoxytetrahydro- α -methylmorphimethine**, and its salts (CAHN), 2567.
- Dihydrodianthranyl**, and *d*ibromo-, *d*ichloro-*d*initro-, and nitro- (MATTHEWS), 239.
- Dihydrodibenzphenarsazines**, chloro- (BURTON and GIBSON), 462.

- Dihydro-dihydrothebainonemethine**, and its perchlorate (CAHN), 2571.
- 4:5-Dihydroiminazole-2-thioglycollic acid**, esters and lactam of (STEPHEN and WILSON), 2535.
- Dihydromethylidihydrothebainonemethine**, and its derivatives (CAHN), 2570.
- Dihydropentazines**, substituted (CHATTAWAY and PARKES), 113.
- 5:10-Dihydrophenarsazine**, 10-bromo- and 10-iodo- (BURTON and GIBSON), 463.
- 10-chloro-, and its derivatives (BURTON and GIBSON), 450, 464, 2241.
- di-* and *tri-*chloro- and 10-chloro-1-amino-, hydrochlorides (BURTON and GIBSON), 2245.
- iso***Dihydroprotopine chlorides** (HAWORTH and PERKIN), 1781.
- 1:2-Dihydroquinaldine**, synthesis of (MASON), 955.
- Dihydrosubercolic acids** (GOSS and INGOLD), 1474.
- 3:5-Diketo-1-benzylcyclohexane** (LINSTEAD and WILLIAMS), 2743.
- 1:3-Diketodecahydronaphthalene** (KON and QUDRAT-I-KHUDA), 3071.
- 1:3-Diketodecahydronaphthalene-4-carboxylic acid**, ethyl ester (KON and QUDRAT-I-KHUDA), 3071.
- 2:4-Diketo-3:5-diphenyltetrahydrothiazole-2-isopropylidenehydrazone** (STEPHEN and WILSON), 2534.
- β -Diketones**, carboxylated (MORGAN and PORTER), 1256.
- 2:4-Diketo-3-phenyl-5-ethyltetrahydrothiazole**, and its 2-isopropylidenehydrazone (STEPHEN and WILSON), 2534.
- 2:4-Diketo-3-phenyltetrahydrothiazole-2-isopropylidenehydrazone** (STEPHEN and WILSON), 2534.
- 2:4-Diketotetrahydrothiazole-3-amino-**, and its hydrazones, hydrochlorides and benzylidene derivatives (STEPHEN and WILSON), 2538.
- leuco*-**Dimalachite-green**, and its diacetate (DUTT), 1179.
- Di-Meldola's blue** (DUTT), 1180.
- $\alpha\alpha'$ -Dimethoxyazelaic acid**, and its silver salt and derivatives (GOSS and INGOLD), 1476.
- 2:3-Dimethoxybenzoic acid**, 5-amino- (RUBENSTEIN), 652.
- 3:4'-Dimethoxybenzophenone** (LEA and ROBINSON), 2355.
- 2:3-Dimethoxybenzyl alcohol**, 5-bromo- and 5-nitro- (RUBENSTEIN), 649.
- 2(2:3-Dimethoxybenzylidene)-1-hydrindone** (PERKIN, RAY, and ROBINSON), 952.
- 2:3-Dimethoxycinnamic acids**, 5- and 6-nitro-, and their ethyl esters (RUBENSTEIN), 652.
- Dimethoxydiazobenzenesulphonic acids**, ammonium salts (PERKIN and RUBENSTEIN), 359.
- 6:7-Dimethoxy-1-(β -dimethylamino-ethyl)phenanthrene**, and its salts (ROBINSON and SHINODA), 1994.
- 5:5'-Dimethoxydiphenyl disulphides**, 2:2'- and 4:4'-*dinitro*- (HODGSON and HANDLEY), 543.
- 3:4'-Dimethoxyflavylum salts**, and 7-hydroxy- (ROBERTSON and ROBINSON), 1952.
- 1:3-Dimethoxy-5-cyclohexane-0:1:2-spirobicyclopentene**, 4-nitro- (HASSELL and INGOLD), 1840.
- 5:6-Dimethoxy-1-hydrindone**, 2-bromo-, and 2-cyano- (PERKIN, RAY, and ROBINSON), 948.
- 5:6-Dimethoxy-1-hydrindone-2-carboxylic acid**, ethyl ester (PERKIN, RAY, and ROBINSON), 949.
- 5:6-Dimethoxy-1-hydrindoneresorcinol** (PERKIN, RAY, and ROBINSON), 949.
- Dimethoxydihydroxydistyryl ketones** (MCGOOKIN and SINCLAIR), 1579.
- 3:7-Dimethoxy-2:6-dihydroxythi-anthren disulphide**, and its diacetyl derivative (SEN and RAY), 1140.
- 2:3[5:6-Dimethoxyindeno(1:2)]dimethoxybenzopyrylium ferrichlorides** (PERKIN, RAY, and ROBINSON), 952.
- 2:3[5:6-Dimethoxyindeno(1:2)]-8-methoxybenzopyrylium ferrichloride** (PERKIN, RAY, and ROBINSON), 953.
- 2:3[5:6-Dimethoxyindeno(1:2)]-6:7-methylenedioxybenzopyrylium ferrichloride** (PERKIN, RAY, and ROBINSON), 952.
- 5:6-Dimethoxyindole-2-carboxylic acid**, ethyl ester (PERKIN and RUBENSTEIN), 360.
- 3:4-Dimethoxy- α -methylcinnamaldehyde**, 6-nitro- (WILLIMOTT and SIMPSON), 2810.
- 6:7-Dimethoxy-1-(3:4'-methylenedioxy- α -cyanobenzyl)-2-methyltetrahydroisoquinoline** (EDWARDS), 744.
- 7:4'-Dimethoxy-2-methylisoflavone**, 5-hydroxy- (BAKER and ROBINSON), 2718.
- 6:7-Dimethoxy-3-methylquinoline**, and its salts (WILLIMOTT and SIMPSON), 2810.
- Dimethoxyphenylhydrazines**, and their hydrochlorides (PERKIN and RUBENSTEIN), 357.
- β -3:4-Dimethoxyphenyl- α -methylhydracrylaldehyde**, β -6-nitro- (WILLIMOTT and SIMPSON), 2810.

- Dimethoxyphenylhydrazinosulphonic acids**, ammonium salts (PERKIN and RUBENSTEIN), 359.
- 3:4-Dimethoxyphenyl 3:4-methylene-dioxy- β -phenyl- α -aminoethyl ketone**, and its salts and derivatives (CAMPBELL, HAWORTH, and PERKIN), 38.
- 3:4-Dimethoxyphenyl 3:4-methylene-dioxy- β -phenylethyl ketone**, and its derivatives (CAMPBELL, HAWORTH, and PERKIN), 37.
- $\alpha\alpha'$ -Dimethoxypimelic acid**, silver salt and ethyl ester of (HASSELL and INGOLD), 1469.
- $\alpha\alpha'$ -Dimethoxypimelic acids**, and their amides (HASSELL and INGOLD), 1470.
- 3:4'-Dimethoxystilbene**, 4-chloro-2-amino-, 4-chloro-2:6'-diamino-, acetyl derivative, 4-chloro-2-nitro-, 4-chloro-2:6'-dinitro-, 2-nitro-4-amino-, and their salts and derivatives (ASHLEY), 2805.
- 7:4'-Dimethoxy-2-styryl-6-methyliso-flavone**, 5-hydroxy-, and its acetyl derivative (BAKER and ROBINSON), 2719.
- 3:4-Dimethoxystyryl veratryl ketone** (PERKIN, KAY, and ROBINSON), 951.
- $\alpha\alpha'$ -Dimethoxysuberic acids** (GOSS and INGOLD), 1475.
- i*-Dimethoxysuccinic acid**, methyl ester and amide (HAWORTH and HIRST), 1865.
- Dimethoxysuccinic acids**, bornyl esters, and their rotation (PATTERSON, FULTON, and SEMPLE), 3224.
- 6:7-Dimethoxytetrahydrocarbazole** (PERKIN and RUBENSTEIN), 360.
- p*-Dimethylamino-*p*'*p*'-diaminotriphenylmethane** (DUTT), 1175.
- p*-Dimethylaminobenzaldehyde** methiodide (FAIRBOURNE and WOODLEY), 3241.
- 4-Dimethylaminobenzaldehyde**, 3-bromo- and 3-nitro-, condensation of ethyl acetoacetate with ammonia and (HINKEL and MADEL), 161.
- p*-4-Dimethylaminobenzeneazo-*p*'*p*'-diaminotriphenylmethane** (DUTT), 1175.
- p*-Dimethylaminobenzylidene pentaerythritol**, and its methiodide (FAIRBOURNE and WOODLEY), 3240.
- 4-Dimethylaminodiphenyl**, and its amino-, nitro-, and nitroso-derivatives and their derivatives (BELL and KENYON), 2707.
- 4-Diethylaminodiphenyl**, bromo- (KENYON and ROBINSON), 3052.
- 6'-Dimethylaminodiphenylarsinic acid**, 2-bromo- (BURTON and GIBSON), 458.
- 4-*p*-Dimethylaminophenyl-2:6-dimethyl-1:4-dihydropyridine-3:5-dicarboxylic acid**, 4-*m*-bromo- and 4-*m*-nitro-, ethyl esters (HINKEL and MADEL), 162.
- 4-*p*-Dimethylaminophenyl-2:6-dimethylpyridine-3:5-dicarboxylic acid**, 4-*m*-bromo-, and 4-*m*-nitro-, ethyl esters (HINKEL and MADEL), 163.
- 4-Dimethylamino-9-styrylxanthylum chloride**, 3:6-*d*hydroxy- (ATKINSON and HEILBRON), 683.
- Dimethylaniline**, *p*-iodo-, action of nitrous acid on, and 4-iodo-2-nitro- (AITKEN and READE), 1896.
- 4:4'-Dimethylanilindiphenyl**, 3:3'-dinitro- (LE FEVRE and TURNER), 2048.
- N,N*-Dimethyl-*o*-anisidine**, 4-nitro- (C. K. and E. H. INGOLD), 1326.
- 2:6-Dimethylbenzobisthiazole** hexabromide (HUNTER), 535.
- 3:5-Dimethylbenzthiazole**, 1-amino-, and its tetrabromide (HUNTER), 1399.
- 2:8-Dimethyl-5:10-dihydrophenarsazine**, 10-chloro-, and its 5-acetyl derivative (BURTON and GIBSON), 468.
- Dimethyl glucose**, new crystalline form of (HAWORTH and SEDGWICK), 2573.
- γ -Dimethyloctan- ϵ -one** (JONES), 2769.
- 1:1-Dimethyl- Δ^2 -cyclopenten-2-ol-4-one**, and 3-bromo- (ROTHSTEIN and THORPE), 2017.
- 2:8-Dimethylphenarsazinic acid**, and its salts and *N*-acetyl derivative (BURTON and GIBSON), 469.
- 10:10-Dimethylphenoxarsonium iodide** (ROBERTS and TURNER), 1209.
- dl*-*cis*-2:5-Dimethylpiperazine**, preparation and resolution of, and its derivatives (KIPPING and POPE), 1076.
- trans*-2:5-Dimethylpiperazine**, formation of, from *dl*-alanine (KIPPING and POPE), 494.
- d*- and *l*-*cis*-2:5-Dimethylpiperazine-*d*-bismethylenecamphor** (KIPPING and POPE), 1078.
- 2:5-Dimethyl-2-*isopropenyl*cyclohexanone**, and its semicartazone (KON and NUTLAND), 3110.
- 3:6-Dimethyltetrahydrocarbazole**, and its picrate (OAKESHOTT and PLANT), 1213.
- Di*- β -naphthylvinyl ketone** (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2257.
- Diphenic acid**, β -dinitro-, constitution and resolution of, and its derivatives (CHRISTIE, HOLDERNESS, and KENNER), 671.
- 4:6:4'-trinitro-**, and 4:6:4':6'-tetranitro-, and their derivatives (CHRISTIE and KENNER), 473.
- Diphenoxtellurylium sulphates** (DREW), 3067.
- pp'*-Diphenoxydiphenyl** ditelluride (DREW), 228.

- 4:4'-Diphenoxydiphenyl, 3:3'-dinitro- (LE FÈVRE and TURNER), 2048.
- pp'*-Diphenoxydiphenyltelluridichloride (DREW), 227.
- Diphenyl, space formula of (LE FÈVRE and TURNER), 2476.
- Diphenyl, 4-amino-, and 4-hydroxyl-amino-, and their derivatives (BELL, KENYON, and ROBINSON), 1243.
- 3:4-diamino-, and its derivatives, 4-amino-4'-hydroxy- and 3-nitro-4-amino-, derivatives of (BELL and KENYON), 2708.
- 3:5-dibromo-, *mono*-, *di*- and *tri*-bromo-amino-, 3:4-dichloro-, *mono*-, *di*-, and *tri*-chloroamino-, and their acetyl derivatives (SCARBOROUGH and WATERS), 557.
- bromoamino-, bromonitroamino-, and chloroamino-derivatives (KENYON and ROBINSON), 3050.
- bromoamino-, bromonitro-, bromonitroamino-, chloronitro- and chloronitroamino-, and their derivatives (LE FÈVRE and TURNER), 2043.
- 4:4'-dibromo-2:3'-diamino-, 4:4'-dibromo-2:3'-dinitro-, 4:4'-dichloro-2:3'-dinitro-, and their derivatives (DENNETT and TURNER), 478.
- 4-chloro-3:3'-dinitro-4'-amino-, and 4:4'-dichlorodinitro-, isomeric, and 3:5'-dinitro-4'-amino-4-hydroxy- (HODGSON and GOROWARA), 1754.
- 4-hydroxy-, derivatives of (BELL and KENYON), 3044.
- di*dodonitro-derivatives (HODGSON), 2385.
- Diphenyl series, orientation in (DENNETT and TURNER), 476; (BELL, KENYON, and ROBINSON), 1239; (HODGSON and GOROWARA), 1754; (LE FÈVRE and TURNER), 1759, 2041; (HODGSON), 2384; (BELL and KENYON), 2705, 3044; (KENYON and ROBINSON), 3050.
- Diphenylamine, *pp'*-dichloro- (BURTON and GIBSON), 2246.
- Diphenylamine-*p*-arsinic acid, and its *N*-acetyl derivative (BURTON and GIBSON), 460.
- 3-Diphenylaminosemicarbazide hydrochloride, benzylidene derivative (BAIRD and WILSON), 2375.
- Diphenylanisylmethoxyphosphorus *di*-chlorides (BOYD and SMITH), 2329.
- Diphenyl-*p*-anisylmethylphosphinic acid (BOYD and SMITH), 2329.
- 9:10-Diphenylanthracene, bromo- and chloro-derivatives (INGOLD and MARSHALL), 3085.
- Diphenylarsinic acid, 2-bromo-6'-amino- and -6'-nitro- (BURTON and GIBSON), 457.
- 1:3-Diphenylbarbituric acid, 5-bromo-, hydrazide (MACBETH, NUNAN, and TRAILL), 1252.
- Diphenylbenzidine, *di*-*o*-amino- and *di*-*o*-nitro-, and their derivatives (TUCKER), 3034.
- d*- α -Diphenyl- α -dibenzylethyl alcohol (MCKENZIE, ROGER, and WILLS), 790.
- Diphenyl-3:3'-dicarboxylic acid, 2:2'-dinitro-, and its ethyl ester (BURTON, HAMMOND, and KENNER), 1804.
- 9:10-Diphenyl-9:10-dihydroanthracene, and its metallic derivatives and bromohydroxy-, *dichloro*dibromo-, and chlorohydroxy-derivatives (INGOLD and MARSHALL), 3085.
- 1:5-Diphenyl-1:4-dihydropentazine, 1:2:4-dibromo- (CHATTAWAY and PARKES), 116.
- s*-Diphenylethane, 3:4'-diamino-, and its derivatives (HARRISON), 1236.
- α -Diphenylethyl alcohol, 3:4'-dinitro- (HARRISON and WOOD), 580.
- 3:5-Diphenylimino-2:4-diphenyltetrahydro-1:2:4-thiadiazole *octabromide* and *hexaiodide* (HUNTER), 536.
- Diphenylnaphthylmethoxyphosphorus *dichlorides* (BOYD and SMITH), 2330.
- Diphenylnaphthylmethylphosphinic acids, and their salts (BOYD and SMITH), 2331.
- r*- and *l*- α -Diphenyl-*n*-propyl alcohols, β -amino- (MCKENZIE, ROGER, and WILLS), 786, 790.
- Diphenyl *disulphide pp'*-diarsinic acid, and its barium salt (HEWITT, KING, and MURCH), 1369.
- 1:4-Diphenyl-1:2:3:5-tetrazole, 1:2:4-dibromo- and 1:2:4-dibromo-4-*m*-nitro- (CHATTAWAY and PARKES), 114.
- s*-Diphenylthiocarbamide, *di*-2:3-dichloro- and -3:4:5-trichloro- (DYSON, GEORGE, and HUNTER), 3042.
- 5:7-Diphenylthiol-8-hydroxyquinoline, bis-2':5'-dichloro- (BROOKER and SMILES), 1729.
- 2:4-Diphenylthiol-1-naphthol, chloro-derivatives (BROOKER and SMILES), 1728.
- Diphenyl-*p*-tolylmethoxyphosphorus *dichloride* (BOYD, SMITH, and TULLY), 2331.
- Diphenyl-*p*-tolylmethylphosphinic acid, and its potassium salt (BOYD and SMITH), 2332.
- Diphenyl-4-acetylchloroamine (BELL, KENYON, and ROBINSON), 1246.

- Diphenylphenylthiocarbamide**, 4'-amino- (LE FEVRE and TURNER), 2484.
- Diphenylthiocarbamic acid** 4'-amino-, phenyl ester (LE FEVRE and TURNER), 2483.
- Diphthalylbenzidine**, nitration of (HODGSON), 2384.
- Dipiperonylisobutyrophenone**, *di- ω -6*-nitro- (PERRIN, RAY, and ROBINSON), 947.
- 3:3'-Di-*n*-propyl-5:5'-azo-1:2:4-triazole** (REILLY and DRUMM), 1733.
- Disopropylidenemannose**, rotation and methylation of (IRVINE and SKINNER), 1089.
- Di-*n*- and -*iso*-propyl ketones**, δ -anilino-, semicarbazones of (BAIRD and WILSON), 2372.
- Dipyronine G** (DUTT), 1179.
- Disaccharides**, constitution of (COOPER, HAWORTH, and PEAT), 876; (HAWORTH and PEAT), 3094.
- Dispersoids**, fixation of methylene-blue by (FODOR and RIWLIN), 102.
- Ditellurodipropionic acid**, and its salts (MORGAN and KELLETT), 1083.
- 4:4'-Ditoyl**, nitro-derivatives (DENNETT and TURNER), 480.
- 9:10-Di-*p*-tolylanthracene**, and its potassium and sodium derivatives (INGOLD and MARSHALL), 3085.
- 9:10-Di-*p*-tolyl-9:10-dihydroanthracene**, 9:10-*di*hydroxy- (INGOLD and MARSHALL), 3085.
- 5:7-Di-*p*-tolylthiol-8-hydroxyquinoline** (BROOKER and SMILES), 1729.
- Di-*p*-tolylthiolphenylacetoneitrile** (BROOKER and SMILES), 1726.
- Dodecahydrosqualene** (HELBERG, HILDITCH, and KAMM), 3135.
- Drying**, intensive, effect of, on inner equilibria (SMITS), 2655; (SMITS, DE LIEFDE, SWART, and CLAASSEN), 2657.
- E.**
- Earths**, rare, ultra-violet spectra of (GARDINER), 1518.
- Elaidic acid**, oxidation of, and its derivatives (HILDITCH), 1828.
- Electrochemical phenomena**, periodic, at copper and silver anodes (HEDGES), 1533.
- Electrodes**, hydrogen, precipitation studies with (BRITTON), 125.
- Electrolysis**, alternating current, arrangement for (SAND and LLOYD), 2971.
- Electrolytes**, strong, hydration of, and viscosity of their aqueous solutions (SUGDEN), 174.
- Electrolytic polarisation** (GLASSTONE), 2887, 2897.
- Emulsions**, photographic. See under Photographic.
- Equilibria**, inner, effect of intensive drying on (SMITS), 2655; (SMITS, DE LIEFDE, SWART, and CLAASSEN), 2657.
- Erbium**, ultra-violet spectrum of (GARDINER), 1518.
- Esters**, alkaline hydrolysis of, in aqueous alcoholic solution (GYNGELL), 2484.
- Esters**, sparingly soluble, rate of hydrolysis of (SMITH and PATERSON), 940.
- Ethane**, *s-tetrabromo*-, action of, on organic bases (FULTON), 197.
- Ethanolbisethylenediamminocupric iodide**, and its thermal properties (MORGAN, CARTER, and HARRISON), 2028.
- 2-Ethoxyanisole**, 4:5-*dinitro*- (ALLAN and ROBINSON), 378.
- 4-Ethoxyanisole**, nitro-derivatives (ROBINSON and SMITH), 395.
- 2-Ethoxybenzaldehyde**, 5-nitro-, semicarbazone (CHATTAWAY), 2725. crystallography of (CHATTAWAY and CURJEL), 3214.
- 2-Ethoxybenzoic acid**, 5-nitro- (CHATTAWAY), 2724.
- 10-Ethoxy-1-hydroxy-4:9-anthraquinone** (GREEN), 1434.
- ω -Ethoxymethylsuccinamide** (INGOLD, SHOPPEE, and THORPE), 1487.
- dl*-2-Ethoxyphenylglycollic acid**, 5-nitro-, and its silver salt and acetyl derivative (CHATTAWAY), 2724.
- 2-*p*-Ethoxyphenylpyridine**, and its picrate (FORSYTH and PYMAN), 2918.
- Ethyl alcohol**, equilibria of, with alkali and alkaline-earth salts (BONNELL and JONES), 318. influence of dissolved salts on miscibility temperatures of mixtures of paraffins with (HOWARD and PATTERSON), 2787. action of iodine on, in presence of aluminium and water (JONES and GREEN), 2760. reactions of, with substituted carbonyl chlorides (PRICE), 3230.
- Ethyl ether**, flame spectra of (EMELÉUS), 2948. iodide, preparation of (JONES and GREEN), 2760. reactions of, with sodium phenoxides in alcoholic solution (GOLDSWORTHY), 1254. hydrogen sulphate (HAMID, SINGH, and DUNNICLIFF), 1098.
- 1-Ethylaminobenzthiazole**, and its *di*-bromide (HUNTER), 2954.

- 1-Ethylaminobenzthiazole, 5-bromo-, and its dibromide (HUNTER and SOYKA), 2962.
- 2-Ethylamino- β -naphththiazole, and its tetrabromide (DYSON, HUNTER, and SOYKA), 2966.
- 9-Ethylcarbazole, 3:6-diiodo- (TUCKER), 552.
- p*-Ethylcarbonato-*m*-methoxybenzoic acid, and its anhydride (HEAP and ROBINSON), 2343.
- 2-Ethyl-1:2-dihydrobenzthiazole, 1-imino-, and its bromides (HUNTER), 1394.
- Ethylene, reaction of bromine with (NORRISH and JONES), 55.
bromohydrin, preparation of (McDOWALL), 499.
- Ethylenediaminobisacetylacetone, compounds of, with copper, nickel, and palladium salts (MORGAN and SMITH), 918.
- Ethylenobisacetylacetone, keto-enolic isomerism of, and its oximes (MORGAN and TAYLOR), 43.
- Ethylenediamine, complex copper salts with (MORGAN and BURSTALL), 2018.
compounds of, with copper, nickel, and palladium compounds of ethylenediaminobisacetylacetone (MORGAN and SMITH), 918.
- Ethyl- α - Δ^1 -cyclohexenylmethyl ethyl ketone semicarbazone (KON and SMITH), 1797.
- 1-Ethylimino-1:2-dihydrobenzthiazole dibromide (HUNTER and SOYKA), 2962.
- 2-Ethyl-2- Δ^1 -cyclopentenylcyclopentanone, and its derivatives (KON and NUTLAND), 3107.
- 2-Ethyl-2-isopropenylcyclopentanone, and its semicarbazone (KON and NUTLAND), 3108.
- α -Ethylstyrene (JOHNSON and KON), 2755.
- o*-Ethylsulphonylbenzenesulphonamide (HURTLEY and SMILES), 1824.
- Europium, ultra-violet spectrum of (GARDINER), 1518.
- Explosion of gaseous mixtures (CAMPBELL and WOODHEAD), 3010.
- F.**
- Filtration of small amounts of material (HARTUNG), 840.
- Fisetin, synthesis of, and its derivatives (ALLAN and ROBINSON), 2334.
- Fish, elasmobranch, constituents of oils from (HEILBRON, KAMM, and OWENS), 1630; (HEILBRON, HILDITCH, and KAMM), 3131; (HARVEY, HEILBRON, and KAMM), 3136.
- Fish liver oils (HEILBRON, KAMM, and OWENS), 1630.
- Flame, propagation of, in mixtures of methane and air (CHAPMAN and WHEELER), 2139.
- Flavone, 3:7:3':4'-tetrahydroxy-, tetraacetyl derivative (ALLAN and ROBINSON), 2335.
- iso*Flavone group, syntheses in (BAKER and ROBINSON), 2713.
- Flavylium salts, hydroxy- (ROBERTSON and ROBINSON), 1951.
- Fluorene, absorption spectrum of (CAPPER and MARSH), 724.
- Fluorene, 2:5- and 2:7-diamino-, and their acetyl derivatives, and 2:5- and 2:7-dinitro- (MORGAN and THOMASON), 2691.
- Fluorine:—
- Hydrofluoric acid, action of, on selenium and tellurium compounds (PRIDEAUX and MILLOTT), 167, 520.
- Hydrofluozirconic acid (PRIDEAUX and ROPER), 898.
- Formic acid, photochemical decomposition of aqueous solutions of (ALLMAND and REEVE), 2852.
velocity of reaction of iodine with (HAMMICK and ZVEGINZOV), 1105.
sodium salt, reduction of silver acetate by (COUTIE), 887.
methyl ester, equilibrium between methyl alcohol and (CHRISTIANSEN), 413.
- Formic acid, trithio-, ethylene ester (HURTLEY and SMILES), 2868.
- 2-Formyl-6-methylquinoline, *p*-nitrophenylhydrazone of (HUMPHRIES), 376.
- Formylphenylacetic acid, ethyl ester, absorption spectra of (MORTON and ROGERS), 713.
- Fructose. See Lævulose.
- γ -Fructose, structure of (HAWORTH and HIRST), 1858.
- α -Fuoylperonylcarbonyl benzoate (GREENE), 335.
- G.**
- Galangin, synthesis of (HEAP and ROBINSON), 2337.
- Gases, absorption of, by colloidal solutions (GATTERER), 299.
ignition of, by explosion (CAMPBELL and WOODHEAD), 3010.
- Gas circulation apparatus (GREEN), 500.
- Gas reactions, termolecular (HINSHELWOOD and GREEN), 730.

- Genistein**, constitution of, and its identity with prunetol (BAKER and ROBINSON), 2713.
- Germanium tetrachloride**, and its ammonia compounds (PUGH and THOMAS), 1051.
- Germanic acid**, salts (PUGH), 2828.
- Glass**, physical properties, composition and preparation of various kinds of (TURNER), 2091.
- β -Gluconolactone**, structure of (HAWORTH and NICHOLSON), 1899.
- Glucose**. See Dextrose.
- 4'- β -Glucosidoxy-7-hydroxy-3-methoxyflavylium chloride**, and its 4'-tetra-acetyl derivative (ROBERTSON and ROBINSON), 1717.
- 4'- β -Glucosidoxy-7-hydroxy-3-methoxy-5-methylflavylium chloride**, and its 4'-tetra-acetyl derivative (ROBERTSON and ROBINSON), 1719.
- β -Glucosidoxy- ω -methoxyacetophenone**, *p*-tetra-acetyl derivative (ROBERTSON and ROBINSON), 1715.
- Glutaconic acids**, chemistry of (PACKER and THORPE), 1199; (FARMER and RICHARDSON), 2172.
- α -Glycerides**, oxidation of allyl esters to (FAIRBOURNE and FOSTER), 3146.
- β -Glycerides**, α -structure of (FAIRBOURNE and FOSTER), 3148.
- Glycerol dibromohydrin**, chlorohydrin, and dichlorohydrin nitrobenzoates (FAIRBOURNE and FOSTER), 3150.
- Glycine**, butyl esters, and their derivatives (MORGAN), 80.
- Glycols**, dehydration of (MCKENZIE and DENLER), 1596.
- Gold**, interaction of hydrogen and nitrous oxide on the surface of (HUTCHISON and HINSHELWOOD), 1556.
- Aurous oxide**, existence of (POLLARD), 1347.
- Chloroauric acid**, action of mercurous nitrate on (POLLARD), 529.
- Guaiacol**, 3- and 6-amino- and -nitro-derivatives, and their derivatives (OXFORD), 2004.
- 5-nitrothio- (HOLMES, C. K. and E. H. INGOLD), 1689.
- Guanidine**, hydrolysis of (BELL), 1213.
- H.**
- Hæmatoxylin**, synthesis of, and its derivatives (PERKIN, RAY, and ROBINSON), 941.
- Hæmoglobin** (BARCROFT), 1146.
- Halides**, estimation of, electrometrically (CLARK), 749.
- Halogens**, lability of, in organic compounds (MACBETH, NUNAN, and TRAILL), 1248.
- Halogen organic compounds**, action of alkaline arsenites on (BALABAN), 569.
- Halogenation of phenols** (SOPER and SMITH), 1582.
- Heat of crystallisation of fatty acids** (GARNER, MADDEN, and RUSHBROOKE), 2491.
- n*-Heptaldehyde δ -anilinosemicarbazone** and methylphenylhydrazone (BAIRD and WILSON), 2370.
- 1-*n*-Heptylamino benzthiazole**, and its dibromide hydrobromide (HUNTER), 2957.
- 1-*n*-Heptylamino benzthiazole**, 5-bromo-, and its dibromide (HUNTER and SOYKA), 2964.
- 2-*n*-Heptylamino- β -naphthathiazole**, and its tetradecabromide (DYSON, HUNTER, and SOYKA), 2969.
- Hexabenzylidistannane** (LAW), 3243.
- Hexahydrobenzylideneacetone semicarbazide-semicarbazone** and semicarbazone (KON and SMITH), 1799.
- n*-Hexane**, effect of intensive drying on (SMITS, DE LIEFDE, SWART, and CLAASSEN), 2666.
- cyclo*Hexane-1-acetic-1-propionic acid**, and its calcium salt, and ethyl ester (NORRIS), 250.
- cyclo*Hexane-1-acetone-1-acetic acid**, and its semicarbazone (NORRIS), 248.
- cyclo*Hexanespiro-3-bromo- Δ^2 -cyclopenten-2-ol-4-one** (ROTHSTEIN and THORPE), 2017.
- cyclo*Hexanespiro-3:5-dichloro- $\Delta^{2,4}$ -cyclohexadiene** (NORRIS), 253.
- cyclo*Hexanespiro-5-chloro- Δ^4 -cyclohexen-3-one**, and its semicarbazone (NORRIS), 248.
- cyclo*Hexane-1:1-dicarboxylic acid**, esters (WIGHTMAN), 2543.
- cyclo*Hexanespirocyclohexan-3:5-dione**, reactions of (NORRIS), 248.
- cyclo*Hexanespirocyclohexane** (NORRIS), 245.
- cyclo*Hexanespirocyclohexan-3-ol**, and its *p*-nitrobenzoate (NORRIS), 249.
- cyclo*Hexanespirocyclohexan-3-one**, and its derivatives (NORRIS), 249.
- cyclo*Hexanespirocyclopentane-2:4-dione** (ROTHSTEIN and THORPE), 2016.
- 5-*cyclo*Hexanespiro-0:1:2-bicyclopentene-1:3-diol**, 4-nitro- and 4-nitroso- (HASSELL and INGOLD), 1839.
- 5-*cyclo*Hexanespirocyclopenten-3-ol**, 1:4-dioximino- (HASSELL and INGOLD), 1839.

- 5-cycloHexanespirocyclopenten-3-ol-1-one**, 4-oximino- (HASSELL and INGOLD), 1839.
- cycloHexanone** δ -anilinosemicarbazone (BAIRD and WILSON), 2371.
- carboxyphenylhydrazones (COLLAR and PLANT), 808.
- α - Δ^1 -**cycloHexenylacetophenone**, and its derivatives (FARROW and KON), 2132.
- 2 - Δ^1 -**cycloHexenylcyclohexanone**, and its derivatives (KON and NUTLAND), 3104.
- Δ^1 -**cycloHexenylmalonic acid**, ethyl ester (KON and SPEIGHT), 2733.
- α - Δ^1 -**cycloHexenylmethyl ethyl ketone semicarbazone** (KON and SMITH), 1797.
- 1-n-Hexylaminobenzthiazole**, and its dibromide (HUNTER), 2957; (HUNTER and SOYKA), 2964.
- 2-n-Hexylamino- β -naphthathiazole**, and its tetrabromide hydrobromide (DYSON, HUNTER, and SOYKA), 2969.
- α -**cycloHexylbutan- γ -one**, α -hydroxy-, and its semicarbazone (KON and SMITH), 1798.
- 1-cycloHexyl-3:5-diketocyclohexane** (KON and SMITH), 1799.
- 1-cycloHexyl-3:5-diketocyclohexane-6-carboxylic acid**, ethyl ester (KON and SMITH), 1799.
- α -**cycloHexylidenebutan- γ -one** semicarbazone (KON and SMITH), 1800.
- α -**cycloHexylidenebutyronitrile** (FARROW and KON), 2134.
- cycloHexylphenylbenzylmethylarsonium salts** (ROBERTS, TURNER, and BURY), 1447.
- Holarrhena*, conessine from species of (KANGA, AYYAR, and SIMONSEN), 2123.
- Homocatechol**, derivatives of (GRAESSER-THOMAS, GULLAND, and ROBINSON), 1971; (GULLAND and ROBINSON), 1976.
- β -**Homochelidonine** (α -*allocryptopine*), formation of, from berberine (HAWORTH and PERKIN), 445.
- Homopiperonylresacetophenone**, 6'-bromo- (BAKRR), 1076.
- Homoveratrole**, 6-bromo-2-nitro-, and 2-nitro-6-amino-, and its salts and derivatives (GULLAND and ROBINSON), 1979.
- 2:6-dinitro-** (GRAESSER-THOMAS, GULLAND, and ROBINSON), 1975.
- Homoveratrole-6-sulphonyl chloride**, 5-nitro- (GULLAND and ROBINSON), 1977.
- 3-Homoveratryl-7-methoxychroman** (PERKIN, RAY, and ROBINSON), 946.
- Hydration** of strong electrolytes (SUGDEN), 174.
- Hydrazines**, action of, on semicarbazones (BAIRD and WILSON), 2367.
- Hydrazinedicarboxymethylamide** (COOPER and INGOLD), 1895.
- ω -**Hydrazinobenzaldehyde-2:4-dibromophenylhydrazone**, and its derivatives (CHATTAWAY and PARKES), 115.
- Hydrazinohomoveratrole**, nitro-, and its piperonylidene derivative (GULLAND and ROBINSON), 1980.
- p*-**Hydrazinophenylpyridines** (FORSYTH and PYMAN), 2917.
- Hydrazobenzaldehyde-2:4-dibromophenylhydrazone** (CHATTAWAY and PARKES), 116.
- Hydrocarbon**, $C_{13}H_{14}$, from dehydrogenation of tetracyclosqualene (HARVEY, HEILBRON, and KAMM), 3138.
- $C_{18}H_{28}$, from reduction of *isophorone* (BAKER), 669.
- Hydrocarbons**, incipient ionisation of hydrogen atoms in (HOLMES and INGOLD), 1305.
- aliphatic higher, boiling points of (FRANCIS and WOOD), 1420.
- condensed nuclear, absorption spectra of (CAPPER and MARSH), 724.
- Hydrocyanic acid**. See under Cyanogen.
- Hydroferricyanic acid**, salts, preparation and estimation of (CUMMING and GOOD), 1924.
- Hydroferrocyanic acid**, salts, preparation and estimation of (CUMMING and GOOD), 1924.
- calcium, potassium, and sodium salts, solubilities of (FARROW), 49.
- Hydrofluoric acid**. See under Fluorine.
- Hydrofluozirconic acid**. See under Fluorine.
- Hydrogen**, ignition of mixtures of carbon monoxide and (CAMPBELL and WOODHEAD), 3010.
- interaction of nitric oxide and (HINSHELWOOD and GREEN), 730.
- interaction of nitrous oxide and, on the surface of gold (HUTCHISON and HINSHELWOOD), 1556.
- Hydrogen fluoride**. See Hydrofluoric acid under Fluorine.
- peroxide*, action of, on solutions of potassium permanganate (DUNNICLIFF and NIJHAWAN), 1.
- sulphide, improved generator for (DENHAM and PACKER), 1344.
- interaction of sulphur dioxide and (MATTHEWS), 2270.
- Hydonaphthalenes**, stereochemistry of (KAY and STUART), 3038.

- Hydroxy-acid**, $C_{22}H_{25}O_9N$, and its salts, from narcotine oxide and hydrochloric acid (DRUMMOND and McMILLAN), 2704.
- Hydroxy-compounds**, decomposition of substituted carbamyl chlorides by (PRICE), 653, 3230.
- Hydroxyl ions**, mobility of (RAIKES, YORKE, and EWART), 630.
- Hydroxylamine**, reaction of ferric chloride with (MITCHELL), 336.
- Hytazarin**, diacetyl derivative (GREEN), 2202.

I.

- Imino-aryl ethers** (CHAPMAN), 2296.
- 2:3-Indeno(1:2)dimethoxybenzopyrylium ferrichlorides** (PERKIN, RAY, and ROBINSON), 951.
- Indolinone compounds**, relative stability of quinolone compounds and (AESCHLIMANN), 2902.
- Iodine**, catalysis of the reaction between acetone and (DAWSON and CARTER), 2282; (DAWSON and DEAN), 2872. action of, on ethyl alcohol in presence of aluminium and water (JONES and GREEN), 2760. velocity of reaction of formic acid with (HAMMICK and ZVEGINZOV), 1105.
- Ionisation constants**, determination of (DAWSON and HOSKINS), 3166.
- Iron**, electro-deposition potential of (GLASSTONE), 2887. periodic passivity of (HEDGES), 2878. removal of, from amalgams (RUSSELL, EVANS, and ROWELL), 1872.
- Iron alloys with cobalt and nickel**, electro-deposition potentials of (GLASSTONE), 2897.
- Iron phosphates** (CARTER and HARTSHORNE), 363. Ferric chloride, reaction of hydroxylamine with (MITCHELL), 336.
- Iron organic compounds**, complex, with oximes (TAYLOR and EWBANK), 2818.
- Isomerism**, dynamic (JONES and LOWRY), 720; (FAULKNER and LOWRY), 1938.
- Itaconic acid**, ethyl ester, action of ethyl sodiomalonate on (INGOLD and SHOPPÉE), 1912.

K.

- Kaempferide**, synthesis of, and its salts and triacetyl derivative (HEAP and ROBINSON), 2336.
- α -Ketoazelaic acid** (GOSS and INGOLD), 1477.
- 10-Ketobehenic acid**, and its amide (G. M. and R. ROBINSON), 2207.

- 3-Keto-1:4-benzdithian-2:2'-spiro-1':3'-benzdithiole** (HURTLEY and SMILES), 2269.
- γ -Ketobutenyl-naphthalenes** (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2257.
- γ -Ketobutyl-naphthalenes**, and their derivatives (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2258.
- 2-Keto-1:2-dihydrobenzothiazole**, and its derivatives (McCLELLAND and GAIT), 921.
- α -Ketoglutaric acid**, *p*-methoxyphenyl-hydrazone of (PERKIN and RUBENSTEIN), 362.
- 2-Keto-1-methyl-1:2-dihydrobenzothiazole** (McCLELLAND and GAIT), 923.
- 4-Ketomyristic acid**, and its oxime (G. M. and R. ROBINSON), 2206.
- Ketone**, $C_{15}H_{20}O_2$, from oxidation of β -caryophyllene (GIBSON, ROBERTSON, and SWORD), 164. $C_{15}H_{24}O$, and its semicarbazone, from oxidation of β -caryophyllene (GIBSON, ROBERTSON, and SWORD), 164. $C_{26}H_{52}O$, from oxidation of paraffin wax (FRANCIS and GAUNTLETT), 2381. $C_{28}H_{56}O$, from oxidation of paraffin wax (FRANCIS and GAUNTLETT), 2381. $C_{29}H_{58}O$, from oxidation of paraffin wax (FRANCIS and GAUNTLETT), 2381.
- Ketones**, cyclic, mobility of (KON and NUTLAND), 3101. optically active, preparation of (McKENZIE, ROGER, and WILLS), 779. unsaturated, alkylation of (KON), 1792.
- 2-Keto-1-methyl-1:2:3:4-tetrahydroquinoline-4-carboxylic acid**, and its methyl ester (AESCHLIMANN), 2908.
- 10-Ketononadecic acid**, and its amide (G. M. and R. ROBINSON), 2207.
- 4-Keto-3-phenyl-1:2-benzoxazine**, 7-nitro- (BISHOP and BRADY), 812.
- 2-Keto-1-phenyl-1:2-dihydrobenzothiazole** (McCLELLAND and GAIT), 923.
- 3-Keto-2-phenyl- ψ -indole**, 6-nitro-, 1-oxide (BISHOP and BRADY), 812.
- 9-Ketostearic acid** (G. M. and R. ROBINSON), 2206.
- 2-Keto-1:2:3:4-tetrahydroquinoline-4-carboxylic acid**, preparation of, and bromo- and iodo-, and their esters (AESCHLIMANN), 2907.
- 2-Keto-1-*o*-tolyl-1:2-dihydrobenzothiazole** (McCLELLAND and GAIT), 923.

Kolbe's synthesis, mechanism of (FAIRWEATHER and WALKER), 3111.

L.

Lactic acid, butyl esters, rotatory dispersion of (WOOD, SUCH, and SCARF), 1928.

Lævulic acids, substituted, spiro-compounds from (ROTHSTEIN and THORPE), 2011.

Lævulose, structure of (HAWORTH and HIRST), 1858.

Lead halides, equilibria of potassium halides, water, and (BURRAGE), 1703.

iodide, solubility of, in sodium chloride solutions (BURRAGE), 1896.

germanate (PUGH), 2832.

suboxide (AUFENAST and TERREY), 1546.

Lead anodes. See under Anodes.

Lectures, delivered before the Chemical Society (BARCROFT), 1146; (TURNER), 2091; (SØRENSEN), 2995.

Leucine, butyl esters, and their salts (MORGAN), 83.

Liquids, potentials at junctions of (CARTER and LEA), 834.

vapour pressure of, by a differential method (JOLLY and BRISCOE), 2154.

organic, and their mixtures, dielectric constants of (SAYCE and BRISCOE), 2623.

organic mixed, dielectric constants of (KERR), 2796.

Lithium germanate (PUGH), 2831.

Lutidine, compound of acetylene tetrabromide and (FULTON), 198.

M.

Magnesium anodes. See under Anodes.

Malonic acid, beryllium salt, conductivity of (SIDGWICK and LEWIS), 2539.

ethyl ester, sodium salt, action of, on ethyl citraconate or itaconate (INGOLD and SHOPPEE), 1912.

Malonic acids, cyclic and open-chain esters, hydrolysis of (GANT and INGOLD), 10.

Maltose, constitution of (IRVINE and BLACK), 862; (COOPER, HAWORTH, and PEAT), 876; (HAWORTH and PEAT), 3094.

Manganese, removal of, from amalgams (RUSSELL, EVANS, and ROWELL), 1872.

Manganese oxides, hydrates, effect of neutral salts on the electrical charge of, and concentration of hydrogen ions liberated (GHOSH), 2605.

sulphate, equilibrium of potassium sulphate, water, and (CAVEN and JOHNSTON), 2628.

β -Mannonolactone, structure of (HAWORTH and NICHOLSON), 1899.

Mannose diacetone. See Diisopropylidenemannose.

m-Meconineacetic acid, and its derivatives (EDWARDS), 748.

Melting point curves of isomerides in the camphor series (ROSS and SOMERVILLE), 2770.

Membranes, nickel, for ultrafiltration (MANNING), 1127.

Menthones, optically active, and their derivatives (READ and ROBERTSON), 2209.

Menthone series (READ and ROBERTSON), 2209; (READ, COOK, and SHANNON), 2223.

Menthylamines, optically active, and their derivatives (READ and ROBERTSON), 2209.

dl-Menthylamines, and their derivatives (READ, COOK, and SHANNON), 2223.

d-isoMenthylcarbamide (READ and ROBERTSON), 2222.

d-isoMenthylphenylcarbamide (READ and ROBERTSON), 2222.

dl-isoMenthylphenylcarbamide (READ, COOK, and SHANNON), 2231.

d-isoMenthylphenylthiocarbamide (READ and ROBERTSON), 2222.

Mercaptides, co-ordinated (DRUMMOND and GIBSON), 3073.

Mercuration of alkylphenols and their aldehydes (HENRY and SHARP), 2432.

of aromatic compounds (COFFEY), 637, 3215.

Mercury, critical temperature of (SAYCE and BRISCOE), 957.

Mercury alloys, order of removal of metals from (RUSSELL, EVANS, and ROWELL), 1872.

Mercurous nitrate, action of chloroauric acid with (POLLARD), 529.

Mercury organic compounds:—

4-Mercuribis-2-nitrotoluene (COFFEY), 639.

Mercuri-2-methyl-6-isopropylbenzaldehyde, 4-hydroxy-5-chloro- (HENRY and SHARP), 2438.

Mercuri-2-nitrotoluene, 4-bromo-, chloro-, and 4-iodo- (COFFEY), 638.

Mercurinitrotoluenes, chloro- (COFFEY), 3218.

- Mercury anodes.** See under Anodes.
- Mesityl oxide,** absorption spectra of (MORTON), 719.
- Mesityloxidoxalic acid,** ethyl ester, absorption spectra of (MORTON and ROGERS), 713.
- Metals,** liquid-line corrosion of (HEDGES), 831.
- Metallic oxides,** finely divided, catalytic decomposition of sodium hypochlorite solutions by (CHIRNOAGA), 1693.
- Methane,** propagation of flame in mixtures of air and (CHAPMAN and WHEELER), 2139.
extinction of flames of, by diluent gases (COWARD and HARTWELL), 1522.
- Methane,** halogen derivatives, absorption spectra of (LOWRY and SASS), 622.
- Methanolbisethylenediamminocupric iodide** (MORGAN and BURSTALL), 2023.
- Methoxyacetic acid,** β -octyl ester (RULE and MITCHELL), 3207.
- 3-Methoxyacetophenone,** ω :4 *d*-hydr-oxy-, acetyl derivatives (NOLAN, PRATT, and ROBINSON), 1970.
- ω -**Methoxyacetophenone,** *p*-hydroxy- (ROBERTSON and ROBINSON), 1715.
- 7-Methoxy-4-*p*-anisyl-2-*p*-dimethylaminostyryl-3-methylbenzopyrylium salts** (HEILBRON and ZAKI), 1906.
- 7-Methoxy-4-*p*-anisyl-2:3-dimethylbenzopyrylium salts** (HEILBRON and ZAKI), 1905.
- 7-Methoxy-4-*p*-anisyl-2-*p*-hydroxy-styryl-3-methylbenzopyrylium salts** (HEILBRON and ZAKI), 1906.
- 3-Methoxybenzaldehyde,** chloro-derivatives, and their derivatives (HODGSON and BEARD), 154.
- 2-Methoxybenzoic acid,** 6-nitro-3-hydroxy- (RUBENSTEIN), 652.
- 3-Methoxybenzoic acid,** 2- and 4-chloro- (GIBSON), 1428.
2:6-dichloro- and 6-nitro-, and their derivatives (HODGSON and BEARD), 153.
2-nitro-4-amino-, acetyl derivative (ROBINSON and SHINODA), 1992.
- Methoxybenzoic acids,** *sec*- β -octyl esters of, and their rotation (RULE and NUMBERS), 2116.
- p*-**Methoxybenzomethylamide,** and its acetyl derivative (BRADY and DUNN), 2416.
- ω -**Methoxybenzoylacetophenones,** and their copper derivatives (BRADLEY and ROBINSON), 2359.
- Methoxybenzoylbenzoins** (GREENE), 328.
- ω -**3-Methoxybenzoyl-3:4-dimethoxyacetophenone,** and its copper derivative (BRADLEY and ROBINSON), 2366.
- ω -**3-Methoxybenzoyl-4-methoxyacetophenone,** and its copper derivative (BRADLEY and ROBINSON), 2365.
- 2-*m*-Methoxybenzylidene-5:6-dimethoxy-1-hydrindone** (PERKIN, RAY, and ROBINSON), 950.
- 2-Methoxybenzoxyanisoles,** nitro-derivatives (OXFORD and ROBINSON), 389.
- 7-Methoxy-3-(6'-bromohomopiperonyl)-2-methyl-1:4-benzopyrone** (BAKER), 1076.
- 2:3-[7-Methoxychromeno(4:3)]7:6:7-dimethoxybenzopyrylium ferrichloride** (PERKIN, RAY, and ROBINSON), 950.
- 7-Methoxy-4-*p*-dimethylaminophenyl-2:3-dimethylbenzopyrylium salts** (HEILBRON and ZAKI), 1906.
- 4-Methoxydiphenyl,** nitro-derivatives (BELL and KENYON), 3048.
- Methoxydiphenyl ethers,** and their nitro-derivatives (LEA and ROBINSON), 412.
- 3-Methoxy-2-ethoxybenzyl alcohol,** 5-bromo- and 5-nitro- (RUBENSTEIN), 650.
- 3-Methoxy-2-ethoxycinnamic acid,** and 5-nitro (RUBENSTEIN), 652.
- 3-Methoxy-2-ethoxyphenanthraphenazine** (ALLAN and ROBINSON), 379.
- Methoxyethoxyphenyl-4:5-thiotriazopyrocatechol methyl ethyl ether,** 6'-nitro- (ALLAN and ROBINSON), 379.
- 4'-Methoxyflavone,** 7-hydroxy-, and its acetyl derivative (ROBINSON and VENKATARAMAN), 2346.
3:7-*di*hydroxy-, and its diacetyl derivative (HEAP and ROBINSON), 2339.
- Methoxyflavylium chlorides,** *tetra*- and *penta*-hydroxy- (GATEWOOD and ROBINSON), 1964.
- 3-Methoxyflavylium salts,** 7:4'-*di*hydroxy- (ROBERTSON and ROBINSON), 1716.
- 3-Methoxy-5-cyclohexanespirocyclopentene-1:4-dione** (HASSELL and INGOLD), 1840.
- Methoxyhydroxystyryl methyl ketones,** and their acetyl derivatives (McGOOKIN and SINCLAIR), 1579.
- 3-Methoxy- α -methylcinnamaldehyde,** 6-nitro- (WILLIMOTT and SIMPSON), 2810.
- 3-Methoxy-5-methylflavylium salts,** 7:4'-*di*hydroxy- (ROBERTSON and ROBINSON), 1718.
- 6-Methoxy-3-methylquinoline,** and its salts (WILLIMOTT and SIMPSON), 2810.

- 5-Methoxy-*a*-naphthaldehyde, and its derivatives (SHOESMITH and RUBLI), 3241.
- 5-Methoxy-*a*-naphthoyl chloride (SHOESMITH and RUBLI), 3242.
- 3-Methoxy-4-oximino-5-cyclohexane-spirocyclopentene-1:4-dione (HASSELL and INGOLD), 1840.
- m*-Methoxyphenol ethylene ether (PERKIN, RÁV, and ROBINSON), 946.
- 4-Methoxyphenol, 2- and 3-nitro-, preparation of, and their derivatives (ROBINSON and SMITH), 392.
- 7-Methoxy-4-phenyl-2-*p*-dimethylaminostyryl-3-methylbenzopyrylium salts (HEILBRON and ZAKI), 1905.
- 7-Methoxy-4-phenyl-2:3-dimethylbenzopyrylium salts (HEILBRON and ZAKI), 1904.
- 7-Methoxy-4-phenyl-2-*p*-hydroxy-*m*-methoxystyryl-3-methylbenzopyrylium salts (HEILBRON and ZAKI), 1905.
- 7-Methoxy-4-phenyl-2-*p*-hydroxy-styryl-3-methylbenzopyrylium salts (HEILBRON and ZAKI), 1904.
- 3-Methoxy-2-phenylindole (ROBINSON and THORNLEY), 3144.
- 7-Methoxy-4-phenyl-2-*p*-methoxystyryl-3-methylbenzopyrylium salts (HEILBRON and ZAKI), 1904.
- 2-Methoxyphenylmethyl sulphoxide, and 5-nitro- (POLLARD and ROBINSON), 3091.
- 2-Methoxyphenylmethyl sulphoxide, 4-nitro- (HOLMES, C. K. and E. H. INGOLD), 1689.
- 2-Methoxyphenylmethylsulphones, nitro- (HOLMES, C. K. and E. H. INGOLD), 1687.
- 4-Methoxyphthalidecarboxylic acid, 3-hydroxy- (PERKIN and TRIKOJUS), 2928.
- 2'-Methoxystyryl benzyl ketone (DICKINSON), 2238.
- 4'-Methoxy-2-styrylisoflavone, 5:7-dihydroxy-, and its diacetyl derivative (BAKER and ROBINSON), 2718.
- Methoxy-9-styrylxanthylium salts, and their hydroxy-derivatives (ATKINSON and HEILBRON), 681.
- 5-Methoxythioanisoles, 2- and 4-nitro- (HODGSON and HANDLRY), 544.
- 3-Methoxytoluene, 2:4-dinitro- (GORNALL and ROBINSON), 1984.
- 3-Methoxy-*o*-toluidines, chloro-, and their acetyl derivatives (GIBSON), 1426.
- Methoxytolyltelluritrichlorides (MORGAN and KELLETT), 1086.
- β -Methoxyisovaleric acid (FARMER and KRACOVSKI), 2321.
- Methyl alcohol, viscosity and density of, and of solutions of electrolytes in it (EWART and RAIKES), 1907.
- equilibrium between methyl formate and (CHRISTIANSEN), 413.
- influence of dissolved salts on miscibility temperatures of mixtures of paraffins with (HOWARD and PATTERSON), 2787.
- Methyl methylfructoside (ALLPRESS), 1722.
- 2-Methylacenaphthpyridine, and its salts, and 4-hydroxy- (NAIR and SIMONSEN), 3141.
- 4-Methylacenaphthpyridine, 2-chloro-, and 2-hydroxy- and its hydrochloride (NAIR and SIMONSEN), 3143.
- N*-Methylaceto-*o*-anisidine, and its nitro-derivatives (C. K. and E. H. INGOLD), 1323.
- 1-Methylaminobenzthiazole, and its bromides (HUNTER), 1393, 2954.
- 1-Methylaminobenzthiazole, 5-bromo-, and its hexabromide (HUNTER and SOYKA), 2961.
- 4-Methylaminodiphenyl, derivatives of (BELL, KENYON, and ROBINSON), 1245.
- 4-Methylaminodiphenyl, dinitro-, and dinitro-4-nitroso- (BELL and KENYON), 2710.
- 6'-Methylaminodiphenylarsinic acid, 2-bromo- (BURTON and GIBSON), 458.
- 2-Methylamino- β -naphthathiazole, and its hexabromide (DYSON, HUNTER, and SOYKA), 2966.
- N*-Methyl-*o*-aminophenol, *ON*-diacetyl derivative (C. K. and E. H. INGOLD), 1327.
- p*-toluenesulphonyl derivative (HEWITT, KING, and MURCH), 1368.
- 4-Methylaminophenylarsinic acid, and its toluenesulphonyl derivative, and its amino- and nitro-derivatives (HEWITT, KING, and MURCH), 1360.
- 4'-Methylanilindiphenyl, bromo- and chloro-dinitro- (LE FÈVRE and TURNER), 2047.
- 4-Methylanilino-2-phenyldimethylpyrimidinium iodide (FORSYTH and PYMAN), 2509.
- 5-Methylanilinosemicarbazide hydrochloride (BAIRD and WILSON), 2373.
- N*-Methyl-*o*-anisidines, nitro- (C. K. and E. H. INGOLD), 1325.
- N*-Methylbenzaldoxime, derivatives of (BRADY, DUNN, and GOLDSTEIN), 2394.
- 2-Methylbenzophenanthrazine, 1:3-dichloro- and 1:3:4-trichloro- (DAVIES and LEEPER), 1416.

- 1-Methylbenzoxazole methiodide and methoperchlorate (CLARK), 234.
- Methylbenzthiazoles, 1-amino-, and their bromides (HUNTER), 1398.
- Methyl benzyl ketone δ -anilino-semicarbazone (BAIRD and WILSON), 2372.
- Methyl *tert.*-butyl ketone δ -anilino-semicarbazone (BAIRD and WILSON), 2371.
- 9-Methylcarbazole, 3:6-*di*iodo- (TUCKER), 552.
- N*-Methyl-*p*-chlorobenzaldoxime (BRADY, DUNN, and GOLDSTEIN), 2391.
- N*-Methylcinnamaldoxime, and its hydriodide (BRADY, DUNN, and GOLDSTEIN), 2393.
- d*-Methyldeoxybenzoin (MCKENZIE, ROGER, and WILLS), 787.
- Methyldeoxytetrahydro- α -methylmorphimethine, and its salts (CAHN), 2566.
- Methyl-7:12-dihydrobenzophenarsazines, chloro- (BURTON and GIBSON), 2244.
- 2-Methyl-1:2-dihydrobenzthiazole, 1-imino-, and its bromides (HUNTER), 1392.
- Methyldihydrodeoxytetrahydro- α -methylmorphimethine, and its salts (CAHN), 2568.
- Methyldihydronaphtha*iso*quinolines, and their picrates (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2257.
- 2-Methyl-5:10-dihydrophenarsazine, 10-chloro-, and its 5-acetyl derivative (BURTON and GIBSON), 468.
- Methyldihydrothebainonemethine, and its salts and derivatives (CAHN), 2569.
- N*-Methyl-3:4-dimethoxybenzaldoxime (BRADY, DUNN, and GOLDSTEIN), 2391.
- dl*-4-Methyldiphenyl sulphoxide, 4'-amino-, preparation and resolution of, and its derivatives (HARRISON, KENYON, and PHILLIPS), 2085.
- Methylene-blue, fixation of, by dispersoids (FODOR and RIWLIN), 102.
by yeast phosphoprotein sols (RIWLIN), 2300.
- d*-Methylenecamphor-*l*-alanine, ethyl ester (KIIPING and POPE), 496.
- 2:3-Methylenedioxybenzaldehyde. See *o*-Piperonal.
- 2:3-Methylenedioxybenzenylaminoxime (PERKIN and TRIKOJUS), 2930.
- 2:3-Methylenedioxybenzoic acid. See *o*-Piperonylic acid.
- 3:4-Methylenedioxybenzomethylamide (BRADY and DUNN), 2415.
- 2:3-Methylenedioxy-cinnamic acid (PERKIN and TRIKOJUS), 2932.
- 3:4-Methylenedioxy-cinnamic acid, 6-bromo-, and its methyl ester (HAWORTH, PERKIN, and STEVENS), 1766.
- 6:7-Methylenedioxy-3-(3':4'-dimethoxybenzoyl)*iso*quinoline, and its sulphate and oxime (CAMPBELL, HAWORTH, and PERKIN), 40.
- 6:7-Methylenedioxy-3-(3':4'-dimethoxybenzoyl)1:2:3:4-tetrahydro*iso*quinoline, and its salts and derivatives (CAMPBELL, HAWORTH, and PERKIN), 39.
- 6:7-Methylenedioxy-3-(3':4'-dimethoxybenzoyl)*iso*quinoline, and its picrate (CAMPBELL, HAWORTH, and PERKIN), 41.
- 6:7-Methylenedioxy-3-(3':4'-dimethoxybenzoyl)-1:2:3:4-tetrahydro*iso*quinoline, and its salts (CAMPBELL, HAWORTH, and PERKIN), 41.
- 2:3-Methylenedioxy-11:12-dimethoxy-6:17- or -6:15-dihydroparaberine, and its salts (CAMPBELL, HAWORTH, and PERKIN), 42.
- 2:3-Methylenedioxy-11:12-dimethoxy-6:15:16:17-tetrahydroparaberine, and its salts (CAMPBELL, HAWORTH, and PERKIN), 41.
- 3:4-Methylenedioxyhomophthalic acid, preparation of, and its anhydride, and 4-bromo- (HAWORTH, PERKIN, and STEVENS), 1764.
- 6:7-Methylenedioxy-1-hydrindone, 4-bromo-, and its derivatives (HAWORTH, PERKIN, and STEVENS), 1767.
- 6:7-Methylenedioxy-3-(α -hydroxy-3':4'-dimethoxybenzoyl)*iso*quinoline, and its picrate (CAMPBELL, HAWORTH, and PERKIN), 40.
- 6:7-Methylenedioxy-3-methylquinoline, and its salts (WILLMOTT and SIMPSON), 2809.
- 3:4-Methylenedioxyphthalide (PERKIN and TRIKOJUS), 2930.
- 3:4-Methylenedioxy-styrene, 6:*o*-*di*-bromo- (HAWORTH, PERKIN, and STEVENS), 1766.
- 3:4'-Methylenedioxy-9-styrylxanthylum chloride (ATKINSON and HILBRON), 682.
- 4':5'-Methylenedioxy-9-styrylxanthylum chloride, 3:6-*di*hydroxy- (ATKINSON and HILBRON), 683.
- Methyl ethyl ketone, equilibrium of, with sodium iodide (WADSWORTH and DAWSON), 2784.

- 5-Methyl-2-ethyl-2-isopropenylcyclohexanone semicarbazone** (KON and NUTLAND), 3110.
- 5-Methyl-2-ethyl-2-isopropenylcyclopentanone**, and its semicarbazone (KON and NUTLAND), 3109.
- 2-Methylisoflavone**, 5:7-4'-trihydroxy-. See 2-Methylgenistein.
- 5-Methylflavylium chloride**, 3:7:3':4'-tetrahydroxy- (ROBERTSON and ROBINSON), 1955.
- Methylfructose**, transformation of, into derivatives of γ -fructose (ALLPRESS), 1720.
- 2-Methylgenistein**, and its derivatives (BAKER and ROBINSON), 2716.
- Methylgenistein dimethyl ether**, synthesis of (BAKER and ROBINSON), 2713.
- β -Methylglutarimide- β -butyric acid**, synthesis of (FARMER and ROSS), 3239.
- 1-Methylglyoxaline**, 4-nitro-5-hydroxy-, and its salts (BALABAN), 571.
- 1-Methyl- $\Delta^{1:3}$ -cyclohexadienyl-3-cyanoacetic acid**, methyl esters, isomeric, and their dibromides (FARMER and ROSS), 1575.
- 1-Methyl- $\Delta^{1:3}$ -cyclohexadienyl-3- α -cyanopropionic acid**, methyl ester (FARMER and ROSS), 1576.
- 1-Methyl- $\Delta^{1:3}$ -cyclohexadienyl-3-propionitrile** (FARMER and ROSS), 1576.
- 6-Methylhexahydrocarbazole**, 10:11-dihydroxy-, acetyl derivatives (MANJUNATH and PLANT), 2261.
- Methylcyclohexanols**, isomerism of, and their esters (GOUGH, HUNTER, and KENYON), 2052.
- 1-Methylcyclohexan-2-one δ -anilinosemicarbazone and phenylhydrazone** (BAIRD and WILSON), 2372.
- 1-Methylcyclohexan-3-one-1-cyanoacetic acid**, and its esters, and their semicarbazones (FARMER and ROSS), 3237.
- 1-Methylcyclohexan-3-one-1-malonamic acid** (FARMER and ROSS), 3239.
- 1-Methyl- Δ^1 -cyclohexene-3:3-dicyanoacetamide and -imide**, and the ammonium salt of the latter (FARMER and ROSS), 1577.
- α -Methyl- Δ^1 -cyclohexenylacetone semicarbazone** (KON and SMITH), 1796.
- 2-Methyl-2- Δ^1 -cyclohexenylcyclohexanone**, and its semicarbazone (KON and NUTLAND), 3105.
- 1-Methyl- Δ^1 -cyclohexenylidene-3-cyanoacetic acid** (FARMER and ROSS), 3237.
- salts and esters (FARMER and ROSS), 1574.
- Methylcyclohexylcarbinol**, resolution of (DOMLEO and KENYON), 1841.
- β -Methylhydroxylamine**, determination of (BRADY and GOLDSTEIN), 2407.
- Methylmaltoside**, and its derivatives (IRVINE and BLACK), 874.
- Methylmethoxybenzaldoximes**, and their derivatives (BRADY, DUNN, and GOLDSTEIN), 2391.
- Methyl-3:4-methylenedioxybenzaldoximes**, and their derivatives, and 6-nitro- and their hydrochlorides (BRADY, DUNN, and GOLDSTEIN), 2389.
- Methylnaphthylquinolines**, bromo-, chloro-, and nitro-, and their derivatives (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2252.
- N-Methyl-2:4-dinitrobenzaldoxime** (BRADY, DUNN, and GOLDSTEIN), 2393.
- N-Methylnitrobenzaldoximes**, derivatives of (BRADY, DUNN, and GOLDSTEIN), 2394.
- Methyloctahydroacridines** (PERKIN and SEDGWICK), 444.
- 2-Methylphenarsazinic acid**, and its sodium salt and hydrochloride (BURTON and GIBSON), 469.
- β -Methylpimelic- β -acetic acid**, and its amide (FARMER and ROSS), 3239.
- Methylisopropylbenzaldehydes**, iodo-4-hydroxy- (HENRY and SHARP), 2439.
- Methylprunetol**. See Methylgenistein.
- 2-Methylquinoline**, and its alkiloides, condensations of (HUMPHRIES), 375; (TAYLOR and WOODHOUSE), 2971.
- 2-Methylquinoline**, ω -bromo-, bromo-nitro-, and ω -hydroxy-derivatives (HAMMICK), 1302.
- 3-Methylquinoline**, preparation of, and its salts (WILLIMOTT and SIMPSON), 2809.
- 1-Methyl-2-quinolone-4-carboxylic acid**, and its methyl ester (AESCHLIMANN), 2908.
- m*- and *p*-Methylstyrenes (TITLEY), 517.
- Methyl-1:2:3:4-tetrahydroacenaphthopyridines**, and their salts and derivatives (NAIR and SIMONSEN), 3141.
- 6(or 8)-Methyltetrahydroacridine**, and its picrate (PERKIN and SEDGWICK), 443.
- 6(or 8)-Methyltetrahydroacridine-carboxylic acid** (PERKIN and SEDGWICK), 444.
- As-Methyltetrahydroarsinoline**, derivatives of (ROBERTS, TURNER, and BURY), 1444.

- 6-Methyltetrahydrocarbazole**, acetyl and benzoyl derivatives, and their derivatives (MANJUNATH and PLANT), 2261.
- 6-Methyltetrahydrocarbazolenine**, 10- and 11-hydroxy-, and their acetyl derivatives (MANJUNATH and PLANT), 2262.
- 6-Methyltetrahydrocarbazyl-9-magnesium iodide** (MANJUNATH and PLANT), 2263.
- Methyl-1:2:3:4-tetrahydronaphthaquinolines**, and their derivatives (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2252.
- S-Methylthioguuaic acid**, and 3:5-dibromo- and 5-nitro- (HOLMES, C. K. and E. H. INGOLD), 1687.
nitration of (POLLARD and ROBINSON), 3090; (C. K. and E. H. INGOLD), 3093.
- Methylthiol groups**, influence of, on colours (HODGSON and HANDLEY), 542.
- γ -Methylxyloside** (HAWORTH and WESTGARTH), 882.
- Michler's hydrol**, condensations with (HUMPHRIES), 375.
- Micro-balance**, studies with (HARTUNG), 840, 1349.
- Molybdenum**, position of, in the potential series (RUSSELL and ROWELL), 1881.
- Molybdenum compounds**, trivalent (WARDLAW and HARDING), 1592.
- Molybdenum bromides** (WARDLAW and HARDING), 1592.
- Monosaccharides**, constitution of (HIRST and MACBETH), 22; (HIRST), 350.
- Morinidin chloride** 3-methyl ether (GATEWOOD and ROBINSON), 1962.
- Morphine derivatives**, degradation of (CAHN), 2562.
- iso-apo* **Morphine dimethyl ether methosulphate** (ROBINSON and SHINODA), 1994.
- Morphine group** (VAN DUIN, ROBINSON, and SMITH), 903; (CAHN and ROBINSON), 908.
- Mother-of-pearl**, formation of (GANGULY), 1381.
- Müller Lecture** (SØRENSEN), 2995.
- N.**
- Naphthalene**, 2-nitro-, preparation of, and its 1-halogen derivatives (HODGSON and KILNER), 7.
- Naphthalene-4 sulphinic acid**, 1-amino-, acetyl derivative (CHILD and SMILES), 2701.
- α - and β -**Naphthanilides** (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2257.
- Naphthaquinolines**, derivatives of (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2247.
- α - and β -**Naphthathiazoles**, 2-amino-, and their tetrabromides (HUNTER), 1400.
- Naphthathioxins**, synthesis of (CHILD and SMILES), 957.
- β -Naphthoic acid**, nitration of (HARRISON and ROYLE), 84.
- α - and β -**Naphthoic acids**, amino-, and nitro-, and their salts and derivatives (HARRISON and ROYLE), 87.
- β -Naphthol**, 1-nitroso-, benzene-sulphophyl derivative (EDWARDS), 815.
- β -Naphthol-1-sulphonic acid**, reaction of diazo-sulphonates from (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 690.
- Naphthyl 4-di-sulphoxide**, 1-amino-, acetyl derivative (CHILD and SMILES), 2701.
- Naphthylamines**, nitro- (HODGSON and KILNER), 7.
- s*- α -Naphthylamylthiocarbamides** (DYSON, HUNTER, and SOYKA), 2968.
- β -1-Naphthylaminocrotono-1-naphthylamide** (GIBSON, HARIHARAN, MENON, and SIMONSEN), 2252.
- s*- α -Naphthylbutylthiocarbamides** (DYSON, HUNTER, and SOYKA), 2967.
- 1- α -Naphthyl-2:2-dibenzylethylene glycol** (MCKENZIE and DENNLER), 1601.
- 1- α -Naphthyl-2:2-dimethylethylene glycol** (MCKENZIE and DENNLER), 1601.
- 1- α -Naphthyl-2:2-diphenylethylene glycol** (MCKENZIE and DENNLER), 1601.
- α -Naphthylglycollic acid**, and its amide and methyl ester (MCKENZIE and DENNLER), 1599.
- s*- α -Naphthyl-*n*-heptylthiocarbamide** (DYSON, HUNTER, and SOYKA), 2969.
- s*- α -Naphthyl-*n*-hexylthiocarbamide** (DYSON, HUNTER, and SOYKA), 2969.
- s*- α -Naphthyl-*n*-propylthiocarbamide** (DYSON, HUNTER, and SOYKA), 2967.
- Naphthylsulphuric acids**, potassium salts (BURKHARDT and LAPWORTH), 689.
- 1- β -Naphthylthiol-2 naphthol** (BROOKER and SMILES), 1728.
- Narcotine**, oxidation of, by hydrogen peroxide (DRUMMOND and McMILLAN), 2702.
- oxide (DRUMMOND and McMILLAN), 2704.

- Neodymium**, ultra-violet spectrum of (GARDINER), 1518.
- Neopine**, constitution of, and its derivatives (VAN DUIN, ROBINSON, and SMITH), 903.
- Nickel**, electro-deposition potential of (GLASSTONE), 2887.
periodic passivity of (HEDGES), 2878.
removal of, from amalgams (RUSSELL, EVANS, and ROWELL), 1872.
- Nickel alloys** with cobalt and iron, electro-deposition potentials of (GLASSTONE), 2897.
- Nickel peroxide** as catalyst (CHIRNOAGA), 1698.
sulphate, equilibrium of potassium sulphate, water, and (CAVEN and JOHNSTON), 2628.
- Nickel organic compounds**, complex, with oximes (TAYLOR and EWBANK), 2818.
with ethylenediaminobisacetylacetone (MORGAN and SMITH), 920.
with $\gamma\gamma'\gamma''$ -triaminotripropylamine (MANN and POPE), 489.
with $\beta\beta''\beta'$ -triaminotriethylamine (MANN and POPE), 482.
- Nickel membranes**. See under Membranes.
- Nicotine bromoanrate** and compound with acetylene tetrabromide (FULTON), 198.
- Nitrogen**, active (WILLEY and RIDEAL), 1804.
- Nitrogen monoxide** (*nitrous oxide*), synthesis of (CHAPMAN, GOODMAN, and SHEPHERD), 1404.
interaction of hydrogen and, on the surface of gold (HUTCHISON and HINSHELWOOD), 1556.
dioxide (*nitric oxide*), interaction of hydrogen and (HINSHELWOOD and GREEN), 730.
catalytic decomposition of, on platinum (GREEN and HINSHELWOOD), 1709.
tetroxide, effect of drying on (SMITS, DE LIEFDE, SWART, and CLAASSEN), 2663.
- Nitrosylsulphuric acid** (ELLIOTT, KLEIST, WILKINS, and WEBB), 1219.
- Normeconinecarboxylic acid**, and its methyl ester (PERKIN and TRIKOJUS), 2927.
- O.**
- Obituary notices** :—
John Young Buchanan, 993.
Katharine A. Burke, 3244.
Giacomo Luigi Ciamician, 996.
Samuel Henry Davies, 1004.
- Obituary notices** :—
William Henry Deering, 1006.
Jam-s Grant, 3244.
Francis Robert Japp, 1008.
Francis Jones, 1020.
Edmund Knecht, 1021.
William Robert Lang, 1024.
William James Lewis, 3245.
Frank George Pope, 1025.
Charles Eddy Potter, 1027.
Shigetake Sugiura, 3246.
Robert Llewellyn Taylor, 1029.
Sir Edward Thorpe, 1031.
- Octahydroacridine**, and its derivatives (PERKIN and SEDGWICK), 438.
- Oleic acid**, oxidation of, and its derivatives (HILDITCH), 1828.
potassium salt, equilibria of potassium chloride, water, and (McbAIN and ELFord), 421.
- Opianylidene-*dl*-piperitone**, and its calcium salt (EARL and READ), 2075.
- Optical activity** and polarity of substituent groups (RULE and SMITH), 553; (RULE and NUMBERS), 2116; (RULE and MITCHELL), 3202.
determination of (READ and McMATH), 2183.
inversion, Walden's (WARD), 1184.
superposition (PATTERSON, FULTON, and SEMPLE), 3224.
- Optically active compounds**, relation between rotation and relative configuration of (CLOUGH), 1674.
- Organic compounds**, relation between crystal structure and length of chain in (PIPER, MALKIN, and AUSTIN), 2310.
lability of halogens in (MACBETH, NUNAN, and TRAILL), 1248.
- Organo-metallic compounds**, cyclic (DREW), 223, 3054.
- Oxalic acid**, photochemical decomposition of aqueous solutions of (ALLMAND and REEVE), 2834.
manganous salt, hydrates of (CHAMBERLAIN, HUME, and TOPLEY), 2620.
sodium salt, reactions of, with salts of weak metallic bases (BRITTON), 269.
- Oxidation**, low temperature, at charcoal surfaces (RIDEAL and WRIGHT), 1813, 3182.
- Oximes**, structure and metallic compounds of (TAYLOR and EWBANK), 2818.
isomerism of (BRADY and GOLDSTEIN), 1918, 2403; (BRADY, DUNN, and GOLDSTEIN), 2386; (BRADY and DUNN), 2411.

- 10:10'-Oxy-5:10-dihydrophenarsazine** (BURTON and GIBSON), 462.
Oxygen, adsorption of, by charcoal (RIDEAL and WRIGHT), 1813.
Ozone, thermal reactivity of, in presence of hydrogen (BELTON, GRIFFITH, and MCKEOWN), 3153.

P

- Palladium organic compounds**:—
 with $\beta\beta'\beta''$ -triaminotriethylamine (MANN and POPE), 482.
 Palladous compounds with ethylene-diaminobisacetylacetone (MORGAN and SMITH), 921.
Palmitic acid, propyl ester (FEAR and MENZIES), 938.
Palmitic acid, 9:10-dihydroxy- (HILDITCH), 1836.
 β -**Palmityl dichlorohydrin** (WHITBY), 1460.
Paraberine, derivatives of (CAMPBELL, HAWORTH, and PERKIN), 32.
Paraffins, influence of dissolved salts on miscibility temperatures of mixtures of ethyl or methyl alcohol with (HOWARD and PATTERSON), 2787.
*cyclo***Paraffins**, structure of (WIGHTMAN), 2541.
Paraffin wax, non-acidic oxidation products of (FRANCIS and GAUNTLETT), 2377.
Passivity, periodic, of metals (HEDGES), 2878.
Pelargonidin chloride, synthesis of (NOLAN, PRATT, and ROBINSON), 1969.
5:7:3':4':5'-Pentamethoxyflavylium salts (GATEWOOD and ROBINSON), 1964.
*bicyclo***Pentane series**, tautomerism in (HASSELL and INGOLD), 1836.
1-cycloPentane-1'-carboxyl-*p*-toluidinocyclopentane-1-carboxylic acid, 1'-hydroxy-, lactone (OAKESHOTT and PLANT), 1212.
*cyclo***Pentane-1:2-dicarboxylic acid**, 2:3-dibromo- (HASSELL and INGOLD), 1469.
*cyclo***Pentanol-1:2-dicarboxylic acid**, and its silver salt and ethyl ester (HASSELL and INGOLD), 1468.
*cyclo***Pentanone-3-carboxylic acid**, ethyl ester, and its semicarbazone (INGOLD, SHOPPEE, and THORPE), 1486.
*cyclo***Pentanonedicarboxylic acid**, ethyl ester (INGOLD, SHOPPEE, and THORPE), 1486.
*cyclo***Pentene-1:2-dicarboxylic acids** (HASSELL and INGOLD), 1469.
 α - Δ^1 -*cyclo***Pentenylacetophenone**, and its derivatives (FARROW and KON), 2135.
*cyclo***Pentylidenemalonic acid**, and its ethyl ester and derivatives (KON and SPEIGHT), 2731.
2-cycloPentylidene-cyclopentanone, and its derivatives (KON and NUTLAND), 3106.
Peonidin chloride, synthesis of (NOLAN, PRATT, and ROBINSON), 1968.
Petroleum, chemistry of (BIRCH and NORRIS), 2545.
 Persian, aromatic hydrocarbons from (BIRCH and NORRIS), 2545.
Phenanthraquinone, 2:7- and 4:5-dinitro-, nitration of (CHRISTIE and KENNER), 470.
 2:4:7-*trinitro*-, and its quinoxaline derivative (CHRISTIE and KENNER), 473.
Phenanthrene, absorption spectrum of (CAPPER and MARSH), 724.
Phenazineazine (DUTT), 1180.
Phenazineazineazine (DUTT), 1180.
p-**Phenetidine zincchloride** (BANFIELD and KENYON), 1625.
Phenol, *o*-amino-, acetyl derivatives, nitration of (C. K. and E. H. INGOLD), 1320.
 3-bromonitro-derivatives, and 3-chloro-2-nitro-, and their salts and derivatives (HODGSON and MOORE), 157.
 3:5-dihalogeno-derivatives, and their acetates and benzoates (HODGSON and WIGNALL), 2077.
Phenols, halogenation of (SOFER and SMITH), 1582.
 nitrosation of (HODGSON and MOORE), 2036.
 condensation of, with chloral (CHATTAWAY), 2720.
Phenols, amino- and nitroamino-, acetyl derivatives (HEWITT and KING), 822.
 3-halogeno-5-amino-, 3-halogeno-5-nitro-, and 3:5-dihalogeno-, and their derivatives (HODGSON and WIGNALL), 2077.
Phenolglutareins (DUTT), 1132.
Phenolsuccineins (DUTT), 1132.
Phenol-4-sulphonic acid, 3-bromo-2:5:6-*trinitro*-, potassium salt (HODGSON and MOORE), 161.
Phenoxides, interaction of aliphatic esters and, in alcoholic solution (GYNGELL), 2484.
 sodium, substituted, reactions of ethyl iodide with (GOLDSWORTHY), 1254.
Phenoxtellurine, and its salts, and 10:10-dichloro- (DREW), 230.
 acetate and sulphates (DREW), 3069.
Phenoxtellurine, nitro-, *dinitro*-, nitrohydroxy-, and *dinitrohydroxy*-, nitrates (DREW), 3065.

- Phenoxtellurone** (DREW), 3069.
- 4'-Phenoxydiphenyl, bromo- and chloro-dinitro-** (LE FEVRE and TURNER), 2047.
- 4-Phenoxyphenol, 2-nitro-** (LEA and ROBINSON), 412.
- o*-Phenoxyphenylmethylchloroarsine** (ROBERTS and TURNER), 1209.
- p*-Phenoxyphenyltelluritrichloride** (DREW), 227.
- Phentharsine, 10-chloro-** (ROBERTS and TURNER), 1207.
- Phenyl acetylacetyl sulphides, mono- and di-chloro-, and *o*-nitro-** (BROOKER and SMILES), 1726.
- 4-acetylamino-naphthyl disulphide, 2:5-dibromo-** (CHILD and SMILES), 2701.
- 1-Phenylacetylisatin** (AESCHLIMANN), 2909.
- Phenyl aminobenzyl ketones, amino-, and their acetyl derivatives** (HARRISON), 1238.
- p*-Phenylaminophenylarsinic acid.** See Diphenylamine-*p*-arsinic acid.
- Phenylisoamylcarbonyl chloride** (PRICE), 3231.
- s*-Phenyl-*n*-amylthiocarbamide** (HUNTER), 2956.
- s*-Phenylamylthiocarbamides, *s-p*-bromo-** (HUNTER and SOYKA), 2963.
- 9-Phenylanthracene, 10-bromo-** (COOK), 2168.
- 10-Phenylanthraphenone** (COOK), 2170.
- Phenylarsenious oxide, 4-amino-, 4'-toluenesulphonyl derivative, 3'-mono- and 3:3'-di-amino-** (HEWITT, KING, and MURCH), 1362.
- o*-bromo-** (BURTON and GIBSON), 457.
- 5-iodo-3-amino-4-hydroxy-, acetyl derivative, and 5-iodo-3-nitro-4-hydroxy-** (MACALLUM), 1647.
- Phenylarsinic acid, 4-amino- and aminohydroxy-, benzene- and toluene-sulphonyl derivatives, and their amino- and nitro-derivatives** (HEWITT, KING, and MURCH), 1360.
- o*-bromo-, preparation of** (BURTON and GIBSON), 456.
- 5-iodo-3-amino-4-hydroxy-, and its salts and derivatives** (MACALLUM), 1645.
- Phenylarsinic acids, aminohydroxy-, and their arylamides** (HEWITT and KING), 817.
- 5-Phenylazobenzene, 2-hydroxy-** (BELL and KENYON), 3047.
- 1-Phenylbarbituric acid, and mono- and di-bromo-, and hydrazide of the monobromo-acid** (MACBETH, NUNAN, and TRAILL), 1253.
- 2-Phenyl-1:3-benzdithiole, and its 2-oxide** (HURTLEY and SMILES), 1827.
- 2-Phenyl-1:3-benzdithiole-1-sulphonium salts** (HURTLEY and SMILES), 1827.
- Phenylbenzidine, *N-o*-nitro-** (TUCKER), 3034.
- N*-Phenylbenziminophenyl thioether** (CHAPMAN), 2298.
- 1-Phenylbenzoxazole methiodide** (CLARK), 235.
- 1-Phenylbenzthiazole, and 5-amino-, 5-bromo-, and 5-nitro-, and their bromides** (HUNTER), 539.
- 5-Phenyl-1:2:3-benztriazole, 1-acetyl derivative** (BELL and KENYON), 2709.
- Phenylbenzylarsinic acid, *l*-menthylamine and strychnine salts** (ROBERTS, TURNER, and BURY), 1447.
- Phenyl *aa*-bis-2:5-dichlorophenylthiolbenzyl ketone** (BROOKER and SMILES), 1727.
- Phenylbromoacetic acid, action of water on** (WARD), 1184.
- β -Phenyl- $\Delta\beta$ -butenoic acid, and its methyl ester** (JOHNSON and KON), 2752.
- γ -Phenyl- $\Delta\beta$ -butenoic acid.** See Styryl-acetic acid.
- Phenylbutylcarbonyl chlorides** (PRICE), 3231.
- δ -Phenyl-*n*-butyldimethylarsine, derivatives of** (ROBERTS, TURNER, and BURY), 1445.
- s*-Phenyl-*n*-butylthiocarbamide** (HUNTER), 2955.
- s*-Phenylbutylthiocarbamides, *s-p*-bromo-** (HUNTER and SOYKA), 2962.
- γ -Phenylbutylamide, α -cyano-** (LINSTEAD and WILLIAMS), 2747.
- Phenylchloroacetic acid, action of water on** (WARD), 1184.
- Phenyl α -5-chloro-2-methoxyphenylthiol- α -2:5-dichlorophenylthiolbenzyl ketone** (BROOKER and SMILES), 1727.
- α -Phenylcinnamamides, 3:4'-*di*-nitro-, stereoisomeric** (HARRISON and WOOD), 1197.
- α -Phenylcinnamic acids, 3:4'-*di*-nitro-, stereoisomeric** (HARRISON and WOOD), 1198.
- piperidine salts** (HARRISON and WOOD), 580.
- 10-Phenyl-9:10-dihydroanthraphenone** (COOK), 2171.
- α -Phenyldihydrocinnamonitrile, 3:4'-*di*-nitro- β -hydroxy-** (HARRISON and WOOD), 1197.
- 2-Phenyl-4:5-dihydroglyoxaline, 2-*m*-nitro-, salts of** (FORSYTH, NIMKAR, and PYMAN), 805.

- 3-Phenyl-1:3-dihydrophthalazine-4-acetic acid, 1-hydroxy-3:4'-nitro-, and its salts and derivatives (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 700.
- 3-Phenyl-1:3-dihydrophthalazine 4-acetic-1-sulphonic acid, 4'-nitro- (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 699.
- m*- and *p*-Phenylenediacetonitriles, reduction of (TITLEY), 508.
- o*-Phenylenethiocarbamide, sodium salt (STEPHEN and WILSON), 2536.
- s*-Phenylethylthiocarbamide, *p*-bromo- (HUNTER and SOYKA), 2962.
- α -Phenyl- γ -ethyl- $\Delta\beta$ - and - $\Delta\gamma$ -penten- α -ones, and their derivatives (FARROW and KON), 2136.
- β -Phenylethylphthalimide (ING and MANSKE), 2350.
- 2-Phenylglyoxaline, bromo- and bromo-nitro-derivatives, and their salts (FORSYTH, NINKAR, and PYMAN), 805.
- s*-Phenyl-*n*-heptylthiocarbamide (HUNTER), 2957.
- s*-Phenyl-*n*-heptylthiocarbamide, *s*-*p*-bromo- (HUNTER and SOYKA), 2964.
- β -Phenyl- $\Delta\beta$ -hexenoic acid, and its derivatives (JOHNSON and KON), 2755.
- Phenylhexenones, isomeric, and their derivatives (JOHNSON and KON), 2758.
- s*-Phenyl-*n*-hexylthiocarbamide (HUNTER), 2957.
- s*-Phenyl-*n*-hexylthiocarbamide, *s*-*p*-bromo- (HUNTER and SOYKA), 2964.
- Phenyl *p*-hydroxybenzyl ketone, 2:4:6-trihydroxy- (BAKER and ROBINSON), 2716.
- β -Phenylhydroxylamine, condensation of acetone with (BANFIELD and KENYON), 1612.
- N*-Phenyliminoisocarbostyryl-3-carboxylic acid, *N*-4'-nitro- (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 705.
- 4-Phenylimino-2-phenyldimethylidihydropyrimidine (FORSYTH and PYMAN), 2508.
- Phenyl-*p*-methoxybenzyl ketone, 2:4:6-trihydroxy- (BAKER and ROBINSON), 2717.
- α -Phenyl-2-methoxystyryl methyl ketone (DICKINSON), 2238.
- 2-Phenyl-6-methyl-4-anilino-pyrimidine, salts and derivatives of (FORSYTH and PYMAN), 2507.
- 2-Phenyl-2-methyl-1:3-benzodithiole (HURTLEY and SMILES), 1527.
- β -Phenyl- α -methylhydracrylaldehyde, β -*o*-nitro- (WILLIMOTT and SIMPSON), 2808.
- 2-Phenyl-6-methyl-4-methylanilino-pyrimidine, salts of (FORSYTH and PYMAN), 2509.
- 3-Phenylmethylmethyleneamino-2:4-diketotetrahydrothiazole 2-phenylmethylmethylenehydrazone (STEPHEN and WILSON), 2537.
- β -Phenyl- γ -methyl- $\Delta\beta$ -pentenoic acid, and its derivatives (JOHNSON and KON), 2756.
- Phenylmethylsulphone, *p*-aming-, acetyl derivative (CHILD and SMILES), 2699.
- 5-nitro-2-hydroxy-, and 3:5-dinitro-2-hydroxy- (POLLARD and ROBINSON), 3092.
- s*-Phenylmethylthiocarbamide, *p*-bromo- (HUNTER and SOYKA), 2961.
- Phenyl nitrobenzyl ketones, nitro- (HARRISON and WOOD), 581.
- Phenyl nitromethanes, preparation and nitration of (BAKER and INGOLD), 2467.
- Phenyl nitrosoamine, *p*-nitro-, condensations with (HUMPHRIES), 375.
- β -Phenyl- $\Delta\beta$ -pentenoic acid, and its derivatives (JOHNSON and KON), 2753.
- δ -Phenyl- $\Delta\gamma$ -penten- β -one, and its semicarbazone (JOHNSON and KON), 2757.
- Phenyl- β -phenylethylmethylarsine, and its methiodide (ROBERTS, TURNER, and BURY), 1446.
- 3-Phenylphthalaz-4-one, 4'-amino-, and its derivatives (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 703.
- N*-Phenylphthalimidine, and 4-amino- and 4-hydroxy-, and their derivatives (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 704.
- β -Phenylpropionic acid, *o*-cyano- (EDWARDS), 816.
- β -Phenylpropionic acids, α -amino- β -hydroxy-. See Phenylserines.
- Phenylpropylcarbamyl chlorides (PRICE), 3230.
- γ -Phenylpropyldimethylethylarsonium iodide (ROBERTS, TURNER, and BURY), 1444.
- s*-Phenyl-*n*-propylthiocarbamide, *s*-*p*-bromo- (HUNTER and SOYKA), 2962.
- Phenylpyridines, amino- and nitro-, and their salts (FORSYTH and PYMAN), 2916.
- 3-Phenyl-2-quinolone-4-carboxylic acid, 6-iodo- (AESCHLIMANN), 2911.
- Phenylserines, isomeric, and their derivatives (FORSTER and RAO), 1943.
- Phenylsuccinic acid, 5-iodo-2-amino- (AESCHLIMANN), 2911.
- 3-Phenyltetrahydrophthalazine-4-acetic acid, 1-hydroxy-3:4'-amino-, and its acetyl derivative (ROWE, LEVIN, BURNS, DAVIES, and TEPPER), 702.

- Phenylthiocarbamides**, *di*- and *tri*-chloro- (DYSON, GEORGE, and HUNTER), 3042.
- Phenylthiocarbimides**, *di*- and *tri*-chloro- (DYSON, GEORGE, and HUNTER), 3042.
- o*-Phenylthiolphenylarsenious oxide (ROBERTS and TURNER), 1208.
- o*-Phenylthiolphenylarsinic acid (ROBERTS and TURNER), 1208.
- o*-Phenylthiolphenyldichloroarsine (ROBERTS and TURNER), 1208.
- β -Phenylvalerolactone** (JOHNSON and KON), 2755.
- iso*Phorone, reactions of, and bromo- (BAKER), 663.
- Phosphinic acids**, formation of, from triarylmethoxyphosphorus dichlorides (BOYD and SMITH), 2323.
- Phosphorus**, inhibition of the glow of (EMELÉUS), 1336.
action of, on silver and other metallic salts (WALKER), 1370.
- Phosphorus pentoxide**, purification of (FINCH and FRASER), 117.
- Phosphoric acid**, conductivity of, at 0° (CAMPBELL), 3021.
- Photochemical change**, variation of the rate of, with intensity of light (BRIERS, CHAPMAN, and WALTERS), 562.
- Photographic emulsions**, analysis of (CLARK), 773.
- Phthalbromomethylimide** (BALABAN), 572.
- Phthalide-acetamide** and -acetonitrile (EDWARDS), 816.
- Phthalidecarboxylic acid**, 3:4-*di*hydroxy-. See Normeconinecarboxylic acid.
- Phthalimidomethanesulphonic acid**, and its barium salt (BALABAN), 573.
- Phthalylbenzidine**, derivatives of (LE FÈVRE and TURNER), 2482.
- α -Picoline**, and its methiodide, condensations of (HUMPHRIES), 375.
compound of acetylene tetrabromide and (FULTON), 199.
- Pieryl chloride**, reaction of pyridine with, in alcoholic solution (HODGES), 2417.
- 4'-Piperazindiphenyl**, bromo- and chloro-*d*-nitro- (LE FÈVRE and TURNER), 2048.
- Piperidinodiphenyls**, *tri*-nitro-, and bromonitro- (LE FÈVRE and TURNER), 2044.
- Piperitone**, condensation of, with aldehydes (EARL and READ), 2072.
- o*-Piperonal, and its derivatives (PERKIN and TRIKOJUS), 2931.
- ω -Piperonylacetophenone, and its copper derivative (BRADLEY and ROBINSON), 2363.
- Piperonyl- α -furylcarbinyl benzoate** (GREENE), 335.
- Piperonyl ethyl ether** (EDWARDS), 743.
- o*-Piperonylic acid, and its derivatives (PERKIN and TRIKOJUS), 2929.
- N*- β -Piperonylethyl-3:4-methylene-dioxyhomophthalamic acid, and its methyl ester (HAWORTH and PERKIN), 1780.
- N*- β -Piperonylethyl-3:4-methylene-dioxyhomophthalimide (HAWORTH and PERKIN), 1779.
- Piperonylideneacyanoacetic acid**, 6-bromo- (BAKER), 1075.
- Piperonylidene-*dl*-piperitone** (EARL and READ), 2075.
- β -Piperonylpropionamide**, β -6-bromo- (BAKER), 1075.
- β -Piperonylpropionic acid**, 6-bromo-, and its methyl ester (HAWORTH, PERKIN, and STEVENS), 1766.
- β -Piperonylpropionitrile**, β -6-bromo- (BAKER), 1075.
- Piperonylpyruvic acid**, oxime of (EDWARDS), 744.
- Piperylene-dicarboxylic acid** (HASSELL and INGOLD), 1468.
- Platinum**, adsorption of water vapour on (LENHER), 1785.
- Platinum anodes**. See under Anodes.
- Polarity** and optical activity of substituent groups (RULE and SMITH), 553; (RULE and NUMBERS), 2116; (RULE and MITCHELL), 3202.
- Polycyclic compounds**, chemistry of, in relation to their homocyclic unsaturated isomerides (BAKER), 663; (HASSELL and INGOLD), 1836.
- Polysaccharides**, constitution of (IRVINE and ROBERTSON), 1488; (IRVINE and MACDONALD), 1502.
- Potassium chloride**, equilibria of potassium oleate, water, and (MCBAIN and ELFFORD), 421.
halides, viscosity and density of methyl alcoholic solutions of (EWART and RAIKES), 1907.
equilibria of lead halides, water, and (BURRAGE), 1703.
- permanganate*, action of hydrogen peroxide on neutral solutions of (DUNNICLIFF and NIJHAWAN), 1.
- nitrate and sulphate, equilibria of, in systems with sodium nitrate and sulphate (HAMID), 199, 206.
- sulphate, equilibria of, with manganese, nickel, and zinc sulphates and water (CAVEN and JOHNSTON), 2628.
- Potential** at liquid junctions (CARTER and LEA), 834.

- Praseodymium**, ultra-violet spectrum of (GARDINER), 1518.
- Precipitates**, studies of (LAMBERT and HUMM-ROTHERY), 2637; (LAMBERT and SCHAFFER), 2648.
- Promoters**, effect of, on catalytic oxidation by charcoal (RIDEAL and WRIGHT), 1813.
- Propane**, $\alpha\beta\gamma$ -tri-amino-, metallic complexes of, and its dihydrochloride hydriodide (MANN and POPE), 2675; (MANN), 2681.
- Propane-1:3:II²⁴-6-keto-4-methyl-3:4:5:6-tetrahydropyridine-5-carboxylic acid**, and bromo- (FARMER and ROSS), 3238.
- Propionic acid**, β -thiol-, methyl ester of, and metallic derivatives (DRUMMOND and GIBSON), 3076.
- p*-isopropoxyacetophenone** (BRADLEY and ROBINSON), 2362.
- 2-Propoxyanisole**, nitro-derivatives (ALLAN and ROBINSON), 380.
- 4-Propoxyanisole**, nitro-derivatives (ROBINSON and SMITH), 397.
- p*-isopropoxybenzoic acid** (BRADLEY and ROBINSON), 2361.
- ω -4-*iso*propoxybenzoylacetophenone**, and its copper derivative (BRADLEY and ROBINSON), 2362.
- 1-*n*-Propylaminobenzthiazole**, and its bromides (HUNTER), 2955.
- 1-*n*-Propylaminobenzthiazole**, 5-bromo-, and its dibromide (HUNTER and SOYKA), 2962.
- 2-*n*-Propylamino- β -naphthathiazole**, and its hexabromide (DYSON, HUNTER, and SOYKA), 2967.
- N*-*n*-Propyl-*o*-benzoic sulphinide** (McCLELLAND and GAIT), 924.
- 9-*iso*propylcarbazole**, 3-iodo- (TUCKER), 553.
- β -Propylcinnamic acids**, derivatives of (JOHNSON and KON), 2755.
- Propyl- Δ^1 -cyclohexenylacetone** semicarbazone (KON and SMITH), 1796.
- Propyl-1:2:4-triazoles**, amino-, and their derivatives (REILLY and DRUMM), 1729.
- 5-chloro- (REILLY and DRUMM), 1735.
- 3-Propyl-1:2:4-triazole-5-azoacetoacetic acids**, ethyl esters (REILLY and DRUMM), 1737.
- 3-Propyl-1:2:4-triazole-5-azoacetylacetones** (REILLY and DRUMM), 1736.
- 3-*iso*Propyl-1:2:4-triazole-5-azo- β -naphthol** (REILLY and DRUMM), 1736.
- 3-Propyl-1:2:4-triazole-5-azo- β -naphthylamines** (REILLY and DRUMM), 1736.
- 3-*n*-Propyl-1:2:4-triazole-5-*isodiazo*-hydroxide** (REILLY and DRUMM), 1735.
- 3-*n*-Propyl-1:2:4-triazolyl-5-hydrazine**, and its benzaldehydhydrazone (REILLY and DRUMM), 1734.
- Protopine**, synthesis of (HAWORTH and PERKIN), 1769.
- Prunetol**, constitution of, and its identity with genistein (BAKER and ROBINSON), 2713.
- Pulegone**, imide from condensation of ethyl sodiocyanoacetate and (KON and NUTLAND), 3110.
- Pyridine**, reaction between picryl chloride and, in alcoholic solution (HODGES), 2417.
- equilibrium of sulphur and (HAMMICK and HOLT), 1995.
- bromoaurate and compound with acetylene tetrabromide (FULTON), 198.
- Pyrocatechol**, crystal structure of (CASPARI), 573.
- Pyrylium salts** of anthocyanidin type (ROBERTSON and ROBINSON), 1951; (GATEWOOD and ROBINSON), 1959; (NOLAN, PRATT, and ROBINSON), 1968.
- Q.**
- Quartz**, adsorption of water on (LENNER), 1785.
- Quercetin**, synthesis of, and its derivatives (ALLAN and ROBINSON), 2334.
- Quinaldine**. See 2-Methylquinoline.
- Quinizarin**, action of thionyl chloride on (GREEN), 1428.
- Quinol**, crystal structure of (CASPARI), 2944.
- Quinoline**, equilibrium of sulphur and (HAMMICK and HOLT), 1995.
- iso*Quinoline derivatives, syntheses of (CAMPELL, HAWORTH, and PERKIN), 32.
- n*- and *iso*-Quinolines, bromoaurates and compounds with acetylene tetrabromide (FULTON), 198.
- iso*Quinoline alkaloids, syntheses of (EDWARDS), 740, 813.
- Quinoline-2-aldehyde**, 8-nitro- (HAMMICK), 1304.
- Quinolinoqupic acetylacetone** (MORGAN and SMITH), 919.
- Quinolone compounds**, relative stability of indolinone compounds and (AESCHLIMANN), 2902.
- 2-Quinolone-4-carboxylic acid**, 6-iodo-, and its esters (AESCHLIMANN), 2910.
- 3-thiol-, quinoxaline derivative (AESCHLIMANN), 2909.

R.

- Reactions, termolecular** (COTTIE), 887.
Resins in coal (FRANCIS and WHEELER), 1410.
Resorcinol, 5-bromo-, 2:4:6-*tribromo*-5-iodo-, 5-chloro-, 5-chloro-2:4:6-*tribromo*-, and 5-iodo- (HODGSON and WIGNALL), 2827.
*iso***Rhamnetin**, synthesis of, and its tetra-acetyl derivative (HEAP and ROBINSON), 2336.
Rhamnose, constitution of (HIRST and MACBETH), 22.
Ring compounds, influence of carbon rings in, on velocity of reactions involving side-chains (GANE and INGOLD), 10.
Rotatory power and chemical constitution (SINGH and PURI), 504; (HARRISON, KENYON, and SHEPHERD), 658; (DOMLEO and KENYON), 1841; (HARRISON, KENYON, and PHILLIPS), 2079.
 relation between relative configurations of optically active compounds and (CLOUGH), 1674.
Rubber. See Caoutchouc.

S.

- Sabinol**, oxidation of, with hydrogen peroxide (HENDERSON and ROBERTSON), 2761.
Salicylaldehyde, condensation of, with benzyl methyl ketone (DICKINSON), 2234.
Salicylic acid, absorption spectra of salts and derivatives of (PURVIS), 775.
 heat of combustion of (VERKADE and COOPS), 1437.
Salicylic acid, 5-nitro-, and its ethyl ester, crystallography of (CHATTAWAY and CURJEL), 3210.
Salicylidene-*dl*-piperitone (EARL and READ), 2074.
Salvarsan, synthesis of iodine derivatives of (MACALLUM), 1645.
Samarium, ultra-violet spectrum of (GARDINER), 1518.
Selenium, oxidation potential of (CARTER, BUTLER, and JAMES), 930.
Selenium dioxide, action of hydrofluoric acid on (PRIDEAUX and MILLOTT), 167.
Selenium organic compounds, aromatic (CHALLENGER, PETERS, and HALÉVY), 1648.
Selenocyanates (CHALLENGER, PETERS, and HALÉVY), 1654.
Selenocyananiline (CHALLENGER, PETERS, and HALÉVY), 1654.
Selenocyanodimethylaniline (CHALLENGER, PETERS, and HALÉVY), 1654.
Seleno-cyano-groups, introduction of, into aromatic compounds (CHALLENGER, PETERS, and HALÉVY), 1648.
Semicarbazones, action of hydrazines on (BAIRD and WILSON), 2367.
Sesquiterpenes, oxidation of, with chromyl chloride and chromic acid (GIBSON, ROBERTSON, and SWORD), 164.
Silicoethylene, dichloro-, dibromide (WIDDOWSON), 958.
Silicon, atomic weight of (ROBINSON and SMITH), 1262.
Silicon tetrachloride, density and coefficient of expansion of (ROBINSON and SMITH), 3152.
dioxide (silica) hydrated, interaction of, with neutral salts in relation to adsorption (MUKHERJEE, GHOSH, KRISHNAMURTI, GHOSH, MITRA, and ROY), 3023.
Silicon organic compounds (WIDDOWSON), 958.
Silver, atomic weight of (RILEY and BAKER), 2510.
Silver salts, action of phosphorus on (WALKER), 1370.
 oxidation of tartaric acid by solutions of (MAXTED), 2178.
Silver germanate (PUGH), 2832.
 iodide, photochemical decomposition of (HARTUNG), 1349.
Silver anodes. See under Anodes.
Soap, equilibria in processes of boiling (MCBAIN and ELFORD), 421.
 solutions, concentration of electrolytes for salting out of (MCBAIN and PITTRER), 893.
Sodium chloride and nitrate, equilibria of barium chloride and nitrate with (FINDLAY and CRUICKSHANK), 316.
 germanate (PUGH), 2828.
 halides, viscosity and density of methyl alcoholic solutions of (EWART and RAIKES), 1907.
 hydroxide, equivalent conductivity of solutions of (RAIKES, YORKE, and EWART), 630.
 hypochlorite, catalytic decomposition of solutions of, by finely divided metallic oxides (CHIRNOAGA), 1693.
 hyposulphite, reduction of arsenic compounds by (FARMER and FIRTH), 119.
 iodide, solubility of, in ethyl alcohol (KING and PARTINGTON), 20.
 equilibria of, with acetone and with methyl ethyl ketone (WADSWORTH and DAWSON), 2784.

- Sodium nitrate and sulphate**, equilibria of, in systems with potassium nitrate and sulphate (HARRID), 199, 206.
- sulphate**, equilibrium of sodium sulphide, water, and (HOGG), 855.
- equilibrium of sodium thiosulphate, water, and (GARRAN), 848.
- sulphide**, equilibrium of sodium sulphate, water, and (HOGG), 855.
- thiosulphate**, equilibrium of sodium sulphate, water, and (GARRAN), 848.
- Solid state**, complexity of (SMITS and SCHOENMAKER), 1108, 1603.
- Solubility** (GLASSSTONE, DIMOND, and JONES), 2935; (GLASSSTONE, DIMOND, and HARRIS), 2939.
- of sparingly soluble compounds (MITCHELL), 1333.
- Solvents**, selective action of (WRIGHT), 1203.
- Spectra**, absorption, and tautomerism (MORTON and ROSNEY), 706; (MORTON and ROGERS), 713.
- of condensed nuclear hydrocarbons (CAPPER and MARSH), 724.
- Tesla-luminescence** (McVICKER, MARSH, and STEWART), 17.
- Squalene**, constitution of, and its identity with spinacene (HEILBRON, KAMM, and OWENS), 1630.
- hydrogenation of**, in presence of nickel (HEILBRON, HILDITCH, and KAMM), 3131.
- Starch**, structure of (IRVINE and MACDONALD), 1502.
- Stearic acids**, *d*-hydroxy-, isomerism of (HILDITCH), 1828.
- Stearolic acid**, hydration of (G. M. and R. ROBINSON), 2204.
- β -Stearyl dichlorohydrin** (WHITBY), 1460.
- Stilbene**, derivatives of (ASHLEY), 2804.
- Stilbene**, *di*amino- and *d*initro-derivatives, asymmetrically substituted (HARRISON), 1232.
- α -chloro*d*initro-, and 3:4'-*d*initro-, and its *d*ichloride (HARRISON and WOOD), 580.
- Stilbene series**, *as*-*di*amino- and *di*-nitro-derivatives (HARRISON and WOOD), 577.
- Strontium sulphate**, precipitated (LAMBERT and HUME-ROTHERY), 2637.
- Styrylacetic acid**, and its salts and derivatives, and α -cyano-, ethyl ester (Linstead and WILLIAMS), 2741.
- Styrylacetone**, and its semicarbazone (Linstead and WILLIAMS), 2744.
- Styryl alkyl ketones**, isomeric (McGOOKIN and SINCLAIR), 1578.
- Styrylbenzopyrylium salts** (HEILBRON and ZAKI), 1902.
- Styryl benzyl ketone**, 2-hydroxy-, and its derivatives (DICKINSON), 2237.
- Styryl 3:4-dimethoxyphenyl ketone**, 2-hydroxy- (ROBERTSON and ROBINSON), 1952.
- Styrylpyrylium salts** (ATKINSON and HEILBRON), 676.
- 9-Styrylxanthylum chloride**, 4'-*mono*- and 3:4':6-*tri*-hydroxy- (ATKINSON and HEILBRON), 680.
- Suberic acid**, $\alpha\alpha'$ -*dibromo*-, and its ethyl ester, and $\alpha\alpha'$ -*d*ihydroxy- (GOSS and INGOLD), 1473.
- Substance**, $C_{13}H_{13}O_2N_4I$, from α -picoline methiodide and *p*-nitrophenylnitrosoamine (HUMPHRIES), 376.
- $C_{15}H_{24}O$, and its semicarbazone, from oxidation of cedrene (GIBSON, ROBERTSON, and SWORD), 166.
- $C_{17}H_{15}O_2N_4I$, from quinaldine methiodide and *p*-nitrophenylnitrosoamine (HUMPHRIES), 376.
- $C_{18}H_{22}O_2N_2$, and its derivatives, from acetone and β -phenylhydroxylamine (BANFIELD and KENYON), 1621.
- $C_{18}H_{17}O_2N_4I$, from quinaldine ethiodide and *p*-nitrophenylnitrosoamine (HUMPHRIES), 376.
- $C_{21}H_{14}O_2$, and its acetate, from benzylideneantbrone dibromide and silver oxide (COOK), 2171.
- $C_{23}H_{27}N_3$, from α -picoline and Michler's hydrol (HUMPHRIES), 375.
- $C_{26}H_{22}O$, from dehydration of 1-*n*-naphthyl-2:2-dibenzylethylene glycol (McKENZIE and DENNLER), 1602.
- $C_{27}H_{29}N_3$, and its oxalate, from quinaldine and Michler's hydrol (HUMPHRIES), 375.
- $C_{28}H_{31}N_3$, from *p*-tolquinaldine and Michler's hydrol (HUMPHRIES), 375.
- $C_{29}H_{34}N_4I$, from *p*-tolquinaldine methiodide and Michler's hydrol (HUMPHRIES), 375.
- $C_{41}H_{36}O_4$, from benzyl methyl ketone and salicylaldehyde (DICKINSON), 2239.
- Substitution in aromatic compounds** (DAVIES and LEEPER), 1413; (FLÜRSCHHEIM and HOLMES), 1562.
- directive power of groups in (ALLAN and ROBINSON), 376; (OXFORD and ROBINSON), 383; (ROBINSON and SMITH), 392; (ALLAN, OXFORD, ROBINSON, and SMITH), 401; (LEA and ROBINSON), 411.

- Substitution in aromatic compounds**, efficiency of oxygen and sulphur in (HOLMES, C. K. and E. H. INGOLD), 1684.
with reference to polar and non-polar dissociation (C. K. and E. H. INGOLD), 1310.
- Sucrose**, constitution of (MCOWAN), 1737, 1747; (HAWORTH and HIRST), 1858.
- Sugars**, classification of (MALBY), 1629.
ring structure of (DREW and HAWORTH), 2305.
carbonates of (HAWORTH and MAW), 1751.
structure of lactones from (HAWORTH and NICHOLSON), 1899.
use of methyl alcohol as solvent for mutarotation of (FAULKNER and LOWRY), 1938.
- Sulphoacetic acid**, chloro-, resolution of, and its salts (READ and McMATH), 2192.
- 3-Sulphobenzoic acid**, 2:4-dinitro-, sodium salt (GORNALL and ROBINSON), 1983.
- p*-**Sulphophenylarsenobenzene** (HEWITT, KING, and MURCH), 1370.
- p*-**Sulphophenylarsinic acid** (HEWITT, KING and MURCH), 1369.
- Sulphoxides**, resolution of (HARRISON, KENYON, and PHILLIPS), 2079.
- Sulphur**, equilibria of, with pyridine, quinoline, and *p*-xylene (HAMMICK and HOLT), 1995.
- Sulphur dioxide**, interaction of hydrogen sulphide and (MATTHEWS), 2270.
trioxide, pure (SMITS and SCHOENMAKER), 1108, 1603.
- Sulphuric acid**, action of copper on (ROGERS), 254.
Thionyl bromide and chlorobromide (MAYES and PARTINGTON), 2594.
chloride, action of, on hydroxy-anthraquinones (GREEN), 1428.
- Supa oil**, constituents of (HENDERSON, M'NAB, and ROBERTSON), 3077.
- T.**
- Tagetes glandulifera*, ketones from volatile oil of (JONES), 2767.
- Tartaric acid**, oxidation of, by silver salts in solution (MAXTED), 2178.
sodium salt, reactions of, with salts of weak metallic bases (BRITTON), 269.
- Tautomerism**, mechanism of (INGOLD, SHOPPEE and THORPE), 1477.
and absorption spectra (MORTON and ROSNEY), 706; (MORTON and ROGERS), 713.
- Tautomerism and additive reactions** (COOPER, C. K. and E. H. INGOLD), 1868.
ring-chain (DUTT), 1132.
three-carbon (KON), 1792; (FARROW and KON), 2128; (KON and SPEIGHT), 2727; (LINSTED and WILLIAMS), 2735; (JOHNSON and KON), 2748; (KON and NUTLAND), 3101.
- Tellurium tetrachloride**, reactions of, with aryl alkyl ethers (MORGAN and KELLETT), 1080.
dioxide, action of hydrogen fluoride on (PRIDEAUX and MILLOTT), 520.
- Tellurium organic compounds**, cyclic (DREW), 223.
- Tellurylium compounds** (DREW), 3054.
- Telluripropionic acid**, tribromo-, and trichloro- (MORGAN and KELLETT), 1087.
- Tetra-acetylglucose**, mutarotation of (JONES and LOWRY), 720.
- Tetra-triaminopropanetricupric salts** (MANN), 2685.
- Tetrabromo(triaminopropanehydrochloride)platinum hydrate** (MANN), 2687.
- Tetracarbethoxy-*l*-arabinose** (HAWORTH and MAW), 1752.
- Tetracarbethoxy-*l*-xylose** (HAWORTH and MAW), 1754.
- Tetracarbomethoxy-*l*-arabinose** (HAWORTH and MAW), 1752.
- Tetracarbomethoxy-*l*-xylose** (HAWORTH and MAW), 1754.
- Tetrachloro(triaminopropanehydrochloride)platinum salts** (MANN), 2686.
- Tetrahydroacridine**, and its derivatives (PERKIN and SEDGWICK), 438.
- As*-**Tetrahydroarsinoline**, chloro- (ROBERTS, TURNER, and BURY), 1443.
- Tetrahydrocarbazole**, derivatives of (COLLAR and PLANT), 808; (MANJUNATH and PLANT), 2260.
- Tetrahydrocarbazolecarboxylic acids**, and their salts and derivatives (COLLAR and PLANT), 808.
- α - and β -**Tetrahydrodeoxycodeines**, isomerism of (CAHN), 2572.
- Tetrahydroisophthalic acids**, and their esters (FARMER and RICHARDSON), 2172.
- 2':3':5:6-Tetramethoxy-2-benzylidene-1-hydrindone** (PERKIN, RAY, and ROBINSON), 953.
- Tetramethoxyflavylium ferrichlorides** (ROBERTSON and ROBINSON), 1954.
- Tetramethyladipic acids**, electrolytic synthesis of (FARMER and KRACOVSKI), 2318.

- 3:3'-Tetramethyl*di*aminodiphenyl (DUTT), 1181.
- 3:6-Tetramethyl*di*amino-9-phenylfluorene, and its acetate (DUTT), 1181.
- Tetramethylbenzidine, 2:2'-*di*amino-, 2-nitro-, and *d*initro-, and their derivatives (BELL and KENYON), 2711.
- Tetramethyl γ -fructose, oxidation of (McOWAN), 1737.
- Tetramethyl gluconolactones, and their phenylhydrazides (CHARLTON, HAWORTH, and PEAT), 99.
- Tetramethylglucose, mutarotation of (JONES and LOWRY), 720; (FAULKNER and LOWRY), 1940. oxidation of (HIRST), 351.
- 1:4:5:8-Tetramethylthianthrene, and its disulphone (SEN and RAY), 1140.
- Tetracyclosesqualene, dehydrogenation of (HARVEY, HEILBRON, and KAMM), 3136.
- Thallium compounds**, use of, in organic chemistry (FEAR and MENZIES), 937.
- Thallium suboxide** (AUFENAST and TERREY), 1546.
- Thallos chloride**, solubility of, in salt solutions, and its heats of solution (BUTLER and HISCOCKS), 2554.
- Thianthrene**, *di*amino-, compounds of, with β -naphthol and with resorcinol (SEN and RAY), 1141.
- Thianthrene series**, synthesis in (SEN and RAY), 1139.
- Thianthrene-2:6-bisdiazoaminobenzene-4'-sulphonic acid** (SEN and RAY), 1141.
- Thiazole derivatives** (STEPHEN and WILSON), 2531.
- Thio-aryl groups**, insertion of (BROOKER and SMILES), 1723.
- Thiocarbonyl chloride**, action of, on chloro-substituted anilines (DYSON, GEORGE, and HUNTER), 3041.
- Thiocarbonylbenzidine**, and its derivatives (LE FRVRE and TURNER), 2483.
- Thiocyanic acid**, ammonium salt, action of light on aqueous solutions of (HOLMES), 1690; (WERNER and BAILLY), 2970.
- Thionyl bromide and chloride**. See under Sulphur.
- 2:3-Thionylanthragallol** (GREEN), 2202.
- 1:2-Thionyl-7-chlorothionylanthrapurpurin** (GREEN), 2200.
- Thionylhystazarin** (GREEN), 2201.
- Thionylpurpurin** (GREEN), 2200.
- Thorium salts**, reactions of, with sodium acetate and tartrate (BRITTON), 272.
- Thyroxin**, tautomerism of (HICKS), 643.
- Tin organic compounds** (LAW), 3243.
- Tin anodes**. See under Tin.
- Titanium** :—
- Titanous sulphate**, oxidation of, by air, and its prevention (RUSSELL), 497.
- Tolane**, *di*amino- and *d*initro-derivatives, asymmetrically substituted (HARRISON), 1232.
- 3:4'-*di*amino-, and its diacetyl derivative, 3:4'-*d*initro- (HARRISON), 1237.
- Tolane series**, *as-di*amino- and *-d*initro-derivatives (HARRISON and WOOD), 577.
- Toluene**, 2:3:4-*tri*amino- and *-tri*nitro- (GORNALL and ROBINSON), 1981.
- 2-chloro-4-nitro-, chlorination of (DAVIES and LEEPER), 1413.
- o*-nitro-, mercuration of (COFFEY), 637; (BURTON, HAMMOND, and KENNER), 1802.
- m*- and *p*-nitro-, mercuration of (COFFEY), 3215.
- Toluene-5-sulphinic acid**, 2-amino-, acetyl derivative (CHILD and SMILES), 2700.
- Toluenesulphinic acids**, 2-nitro- (COFFEY), 642.
- 4-nitro-, and their salts (COFFEY), 3220.
- p*-Toluenesulphonamides, substituted, hydrolysis of (HOLMES and INGOLD), 1308.
- p*-Toluenesulphonic acid, beryllium salt (SIDGWICK and LEWIS), 1290.
- 4-Toluenesulphonic acid, 3-nitro-, salts of (HEWITT, KING, and MURCH), 1360.
- Toluenesulphonic acids**, 4-nitro-, and 4-nitro-2-amino-, and their salts (COFFEY), 3221.
- Toluene-5-sulphonyl chloride**, 2-amino-, acetyl derivative (CHILD and SMILES), 2700.
- m*-Toluic acid, ω -chloro-, ethyl ester (MORGAN and PORTER), 1258.
- o*-Toluidine, 3-bromo-, acetyl derivative (BURTON, HAMMOND, and KENNER), 1803.
- m*-Toluidine, 2:6-*di*chloro-4-nitro- (DAVIES and LEEPER), 1416.
- 1-*p*-Toluidino-1-cyanocyclopentane (OAKESHOTT and PLANT), 1211.
- 1-*p*-Toluidinocyclopentane-1-carboxylic acid, and its derivatives (OAKESHOTT and PLANT), 1210.
- o*-Toluanitrile, 6-bromo- (BURTON, HAMMOND, and KENNER), 1803.
- p*-Toluoxy-2-methylquinoline, and its methiodide, condensations of (HUMPHRIES), 375.

- 2:5-Toluquinone, halogen derivatives and their oximes (HODGSON and MOORE), 2036.
- Tolthiazoles, ψ -amino-, hydrochlorides (HUNTER), 1397.
- Tolyl mercaptan, sulphides and sulphoxides, 2-amino-, and their acetyl derivatives (CHILD and SMILES), 2700.
- m*-Tolyl methyl ether, 2:6-dichloro-, and 6-chloro-2-nitro- (GIBSON), 1426.
- 6-*mono*- and 2:6-*di*-nitro-4-hydroxy-, acetyl derivatives (GRAESSER-THOMAS, GULLAND, and ROBINSON), 1974.
- p*-Tolyl acetylacetyl sulphide (BROOKER and SMILES), 1726.
- methyl ether, 3-hydroxy-, and 5-nitro-3-hydroxy-, acetyl derivatives, and 2-nitro-3-hydroxy- (GULLAND and ROBINSON), 1978.
- selenocyanate (CHALLENGER, PETERS, and HALÉVY), 1654.
- N-p*-Tolylbenzimidino-*p*-tolyl thioether (CHAPMAN), 2298.
- m*-Tolylenediamine-3-sulphonic acid, sodium salt and derivatives (GORNALL and ROBINSON), 1982.
- β -*m*- and -*p*-Tolylethylamines, and their derivatives (TITLEY), 517.
- o*-Tolylethylcarbonyl chloride (PRICE), 3231.
- β -*m*- and -*p*-Tolylethylmethylamines, and their salts (TITLEY), 517.
- m*-Tolyl- α -naphthylamine, 2:4-dinitro- (GORNALL and ROBINSON), 1984.
- Tolyl 2-nitrotoluene-5-sulphazide, 2-nitro- (COFFEY), 642.
- m*-Tolylpiperidine, 2:4-dinitro- (GORNALL and ROBINSON), 1984.
- 5-*p*-Tolylthiol-6-hydroxyquinoline (BROOKER and SMILES), 1728.
- 1-*p*-Tolylthiol-2-naphthol (BROOKER and SMILES), 1728.
- α -*p*-Tolylthiolpropionic acid (BROOKER and SMILES), 1726.
- 3:4:5-Triacetoxy- ω -methoxyacetophenone (GATEWOOD and ROBINSON), 1965.
- Triazans, reversible formation of (COOPER and INGOLD), 1894.
- Tribenzylamine, *mm'm'*-trinitro- (GOSS, INGOLD, and WILSON), 2457.
- α - and ω -1:3:4-Tricarbethoxy-2-ketocyclopentylmethylsuccinic acids, ethyl esters (INGOLD and SHOPPEE), 1916.
- Triethylamine, $\beta\beta'\beta''$ -triamino-, complex nickel and palladium salts of (MANN and POPE), 482.
- Tricyclohexylarsine, derivatives of (ROBERTS, TURNER, and BURY), 1446.
- 3:4:3'-Trimethoxybenzophenone, and its oxime (LEA and ROBINSON), 2355.
- 3:4:5-Trimethoxybenzoylacetophenone, and its copper derivative (BRADLEY and ROBINSON), 2365.
- 3:3':4'-Trimethoxyflavone, 7-hydroxy-, 5:7-dihydroxy-, and their acetyl derivatives (ALLAN and ROBINSON), 2335.
- 5:7:4'-Trimethoxy-2-methylsoflavone (BAKER and ROBINSON), 2718.
- 3:3':4'-Trimethoxy-5-methylflavylium ferrichloride, 7-hydroxy- (ROBERTSON and ROBINSON), 1955.
- 3:4:5-Trimethoxyphenyl 2-hydroxy-4:6-dimethoxystyryl ketone (GATEWOOD and ROBINSON), 1963.
- Trimethyl γ arabonolactone, structure of (HAWORTH and NICHOLSON), 1899.
- Trimethylenesilicon dichloride (WIDDOWSON), 958.
- Trimethylglucose, new crystalline forms of (HAWORTH and SEDGWICK), 2573.
- 3:3:5-Trimethylcyclohexan-1-one, 1:3:4:5-tetrabromo- (BAKER), 668.
- 1:1':3:3:3':3'-Trimethylbicyclohexyl-5:5'-dione, and its disimcarbazone (BAKER), 669.
- Trimethylnaphthalene picrate (BIRCH and NORRIS), 2553.
- Triphenylstibine hydroxyselenocyanate (CHALLENGER, PETERS, and HALÉVY), 1653.
- Trimethyl xylonolactones (HAWORTH and WESTGARTH), 885.
- Trimethyl γ -xylose (HAWORTH and WESTGARTH), 885.
- Triphenylmethane, *p*-hydroxy-*p'p''*-diamino- (DUIT), 1174.
- Triphenylmethoxyphosphorus dichlorides, *p*-bromo-, *p*-chloro-, and *p*-nitro- (BOYD and SMITH), 2327.
- 9-Triphenylmethylanthrone, 9-hydroxy- (INGOLD and MARSHALL), 3087.
- Triphenylmethylphosphinic acid, *p*-bromo-, *p*-chloro-, and *m*-hydroxy-, and their salts and derivatives (BOYD and SMITH), 2328.
- 2:4:6-Triphenylthiophloroglucinol, chloro-derivatives (BROOKER and SMILES), 1727.
- Triphthalimidotripropylamine, and its hydrobromide (MANN and POPE), 490.
- Tripropylamine, $\gamma\gamma'\gamma''$ -triamino-, and its salts and derivatives and complex compounds with nickel (MANN and POPE), 489.
- Triphthalium methylglucoside (FEAR and MENZIES), 939.
- 2:4:6-Tri-*p*-tolylthiolorcinol (BROOKER and SMILES), 1728.
- 2:4:6-Tri-*p*-tolylthiophloroglucinol (BROOKER and SMILES), 1727.

2:4:6-Triphenylthiolresorcinol, chloro-derivatives (BROOKER and SMILES), 1728.

Trypanocidal action and chemical constitution (HEWITT and KING), 817; (HEWITT, KING, and MURCH), 1855.

Tungsten, position of, in the potential series (RUSSELL and ROWELL), 1881.

U.

Ultrafiltration, nickel membranes for (MANNING), 1127.

Unsaturated compounds, formation of, from halogenated open-chain derivatives (HASSELL and INGOLD), 1465; (GOSS and INGOLD), 1471.

orienting influence of free and bound ionic charges on simple or conjugated (ING and ROBINSON), 1655.
homocyclic, chemistry of polycyclic compounds in relation to isomeric (HASSELL and INGOLD), 1836.

V.

Valency (NORRISH and JONES), 55; (LOWRY and OWEN), 608; (LOWRY and SASS), 622.

Valine, *n*-butyl ester, and its hydrochloride and picrate (MORGAN), 83.

Vanadium :—

Vanadous sulphate as a reducing agent (RUSSELL), 497.

Vapour pressure of liquids, by a differential method (JOLLY and BRISCOE), 2154.

Veratric anhydride (ALLAN and ROBINSON), 2334.

Veratrole, 3- and 6-amino- and -nitro-derivatives, and their derivatives (OXFORD), 2004.

***N*- β -Veratrylethyl-3:4-methylenedioxyhomophthalamic acid**, and its methyl ester (HAWORTH and PERKIN), 1776.

***N*- β -Veratrylethylmethylenedioxyhomophthalimides** (HAWORTH and PERKIN), 1776.

2-Veratrylidene-4:6-dimethoxycoumaranone (PERKIN, RAY, and ROBINSON), 951.

2-Veratrylidene-1-hydrindone (PERKIN, RAY, and ROBINSON), 951.

Veratrylidene-7-methoxychromanone (PERKIN, RAY, and ROBINSON), 941.

Viscosity of aqueous solutions of strong electrolytes (SUGDEN), 174.

W.

Walden inversion (WARD), 1184.

Water vapour, adsorption of, on quartz and on platinum (LENER), 1785.

X.

Xanthenes, hydroxy-, preparation of (ATKINSON and HELLBRON), 2688.

Xanthorrhæa arborea*, *hastilis, and *reflexa*, volatile oils from (FINLAYSON), 2763.

***p*-Xanthylphenylarsinic acid** (HEWITT, KING, and MURCH), 1869.

***p*-Xylene**, equilibrium of sulphur and (HAMMICK and HOLT), 1995.

Xylidinodimethylbenzthiazoles, and their tetrabromides (HUNTER), 1403.

γ -Xylose, derivatives of (HAWORTH and WESTGARTH), 880.

Y.

Yeast, fixation of methylene blue by phosphoproteins of (RIDLIN), 2300.

Z.

Zinc, deposition of, on anodes in voltaic cells (HUMBY and FERRIN), 959.

diffusion of, in solid solution in copper (DUNN), 2373.

Zinc compounds, co-ordinated, optical activity of (MILLS and GOTTS), 3121.

Zinc sulphate, equilibrium of potassium sulphate, water, and (CAYEN and JOHNSTON), 2628.

Zinc organic compounds :—

Zincbenzoylpyruvic acid, brucine salt (MILLS and GOTTS), 3131.

Zinc anodes. See under Anodes.

Zirconium salts, reactions of, with sodium acetate, oxalate, and tartrate and with dextrose (BRITTON), 269.

Zirconium fluoride, analysis of (PRIDEAUX and ROPER), 898.