

INDEX OF SUBJECTS, 1940.

A.

Acenaphthene, bromonitro-derivatives, 450.
Acetanilide, *o*-chloronitroso-, 367.
Acetic acid, distribution of, between benzene and water, 850.
 lead salt, reaction of, with ethylene glycol, 82.
isopentenyl ester, 1177.
 sodium salt, hydrolysis of, 580.
Acetic acid, cyano-, ethyl ester, refractive index of, 1528.
Acetoacetic acid, action of, on cinnamyl alcohol and phenylvinylcarbinol, 1266.
 ethyl ester, action of, on geraniol and linalool, 704.
Aceto- $\alpha\beta$ -di-*p*-chlorophenylhydrazide, 335.
Aceto- $\alpha\beta$ -di-*p*-tolylhydrazide, 335.
Acetone, dielectric constant of, 894.
 δ -(*a*-phenylpropyl)semicarbazones, 337.
Acetophenone, reaction of, with benzaldehyde, 1295.
Acetophenone, hydroxy-derivatives, spectra of, absorption, 1351.
m-nitro-, diphenylhydrazone, 170.
Aceto- β -phenyl- $\alpha\beta$ -*p*-tolylhydrazide, 335.
3(β)-Acetoxy-4 α -cholestadiene, 67.
3-Acetoxycholestan-4-one 5,6-oxide, 63.
cis-3-Acetoxy-4 β -cholesten-4-ol, and its dibromide, 63.
 3-Acetoxy-4 β -cholesten-4-one, 64.
4-Acetoxy-2,6-dibenzylidene cyclohexanone, 14.
2-Acetoxy-2,4;4'7'-pentamethylifavan, 1105.
Acetyl-3,4-benzphenanthrenes, and their semicarbazones, 1160.
1-Acetylbenzisothiazolone, 1-chloro-, 325.
2-Acetylcarbamyl-1-thionaphthen, 3-hydroxy-, and its acetyl derivative, 327.
1-Acetyl-2,3-dimethyl-2,3-dihydroindole, 2,3-dihydroxy-, and 3,6-dinitro-2-hydroxy-, 286.
2-Acetyl-3-dimethylphthalimidine, 1088.
N⁴-Acetyl-N¹-dimethylsulphanilamide, 688.
Acetyl-*L*-ephedrine, 1154.
Acetyl- $\alpha\beta$ -ephedrine, and its salts, and nitroso-, 1154.
N⁴-Acetyl-N¹-ethylsulphanilamide, 690.
N⁴-Acetyl-N⁴-ethylsulphanilamide, 690.
N⁴-Acetyl-N¹-ethylsulphanilamidoacetic acid, amide and nitrile, 1576.
N-Acetyl-4:2'-difluoro-2:4'-diacetoxypiperylamine, 206.
N-Acetyl-4:4'-difluoro-2:2'-diacetoxypiperylamine, 207.
N-Acetylglucosamine, 433.
N⁴-Acetyl-N¹-methylsulphanilamidoacetic acid, amide and nitrile, 1576.
Acetyloleanic acid, methyl ester, oxide, 1389.
 oxidation of, and of its methyl ester, with perbenzoic acid, 1387.
Acetyloleanic acid, hydroxy-, lactone, 1389.
N⁴-Acetyl-N¹-pentamethylenesulphanilamide, 689.
3-Acetyl-8-phenylacetylcoumarin, 5-hydroxy-, 247.
 γ -Acetyl- α -phenylbutyric acid, and its derivatives, and α -cyano-, ethyl ester, 849.
3-Acetyl-8-propionylcoumarin, 5-hydroxy-, 246.
N⁴-Acetyl-8-propionylsulphanilamidoacetic acid, amide and nitrile of, 1575.
8-Acetyltetrahydropentindole, 5-chloro-6:10-dinitro-9-hydroxy-, 285.

8-Acetyltetrahydropentindole, 6:10-dinitro-9-hydroxy-, 285.
Acids, aliphatic lower, ethyl esters, hydrolysis of, 339.
 dibasic, thermodynamic dissociation constants of, 855.
 carboxylic, esters, racemisation of, by sodium ethoxide, 216.
dicarboxylic, barium and calcium salts, dissociation constants of, 87.
 complex, physico-chemical studies of, 764, 895.
 dissociation constants of, 1447.
 optical activation of, 264.
Acid anhydrides. See under Anhydrides.
Activation energy in relation to dissociation constants and resonance, 1447.
Acyarylaminés, action of nitrous gases on, 361.
Acyarylaminés, nitroso-, 361, 369, 372.
Acylbenzisothiazolones, reaction of, with acetic anhydride and potassium acetate, 323.
N-Acylglucosamines, action of dilute alkali solution on, 428.
4-Acylresorcinols, Gattermann reaction with, 245.
Address, presidential, 505.
Adenine, spectrum of, absorption ultra-violet, 844.
Adipic acid, thermodynamic dissociation constants of, 858.
Adipic acid, tetrahydroxy-, and its derivatives, 865.
Adsorption, discontinuous, 156.
 interfacial, between two fluids, 596.
Alcohols, dielectric polarisation of, and their solutions, 888.
 of cyclohexane series, 243.
 reactivity of, effect of long- and short-lived radicals on, 880.
 $\alpha\beta$ -unsaturated, addition of, to methylene groups, 704.
 $\beta\gamma$ -unsaturated, addition of, to active methylene groups, 1266.
Aldehydes, halogenated, reaction of, with arylhydrazines, 813.
Aldehydo-2:4-dimethyl 3:6-anhydrogalactose, 625.
2-Aldehydo-5-methoxyphenoxyacetic acid, and its ethyl ester, 2:4-dinitrophenylhydrazones, 794.
Alizarin, aluminium lakes of, 603.
Alkaloids, curare, 737.
 of *Duboisia myoporoides*, 1155.
Alkyl groups, polar effects in, 949.
 halides, unimolecular solvolysis of, 960, 966, 971, 974, 979.
Alkylamino-acids, preparation of, and their electro-metric titration, 1290.
4-Alkylaminoazobenzene-4'-arsonic acids, synthesis of, 576.

p-Alkylbenzhydryl chlorides, substitution in, 949.
 halides, hydrolysis of, in aqueous acetone, 971.
Alkyl ketones, constitution, physical properties, and preparation of, 171.
1-Allylcyclohexanyl 3:5-dinitrobenzoate, 14.
Allylidene cyclohexane, preparation and spectrum of, 1462.
Altrose series, Walden inversion in, 319.
Aluminium chloride, compound of, with hydrogen cyanide, 407.
Aluminium lakes of azo-dyes, structure of, 603.

- Amines**, aromatic, nuclear alkylation of, 388.
 tertiary, action of nitrous acid on, 1286.
- Amino-sugars**, 428.
- Ammines**, formation of, in acetone and in ethyl and methyl acetates, 1360.
- n-Amylaminooacetic acid**, and its derivatives, 1292.
- 4-Amylaminobenzene-4'-arsonic acids**, 577.
- 5-n-Amyl-1:2-benzanthracene**, 304.
- 5-n-Amyl-7:8-dihydro-1:2-benzanthracene**, 304.
- β -Amyradienol**, and its derivatives, 1198.
- β -Amyradienone**, and its oxime, 236.
- α -Amyradienyl acetate**, oxidation of, 1196.
- α -Amyradienyl acetate**, 1198.
- β -Amyranonyl acetate enol-acetate**, 1512.
 benzoate, 235.
- epi(iso)- α -Amyrenonyl acetate**, 1197.
- β -Amyrin benzoate**, oxidation of, 230.
- Analysis**, microchemical, of gases, 1300.
 qualitative, semimicro-, 1258, 1263.
- Anhydrides**, acid, aliphatic, physical properties of, 32.
- Anhydrocellobiosazone**, and its penta-acetyl derivative, 1480.
- 3:6-Anhydrogalactonic acid**, methyl ester, 631.
- 3:6-Anhydrogalactose**, properties of, 620.
- 3:6-Anhydrogalactose dimethylacetal**, and its 2:4:5-tri-*p*-nitrobenzoyl derivative, 630.
- 3:6-Anhydro- α -methylgalactopyranoside**, 624.
- 3:6-Anhydro- β -methylgalactopyranoside**, 629.
- Anhydromethylhexosides**, 1479.
- 1-Anilinobenzthiazole**, 193.
- α -Anilinofumaric acid**, α -*p*-amino-, acetyl derivative, ethyl ester, 1167.
- Anions**, toxic elements in, 252.
- Anisole**, 2-bromo-4-nitroso-, 2-fluoro-4-nitroso-, and 2-iodo-4-nitroso-, 812.
- 3-fluoro-4-amino-, -6-amino-, and its acetyl derivative, -4-nitroso-, and -6-nitroso-, 1270.
- 2-Anisoylanisic acid**, and 5(or 3)-nitro-2- ω -3'-nitro-, 1097.
- p -Anisoyl-2-hydroxy-1-naphthoylmethane**, 1500.
- 2- p -Anisoyloxy-1-acetonaphthone**, 1499.
- Anisoyloxydimethoxyacetophenones**, 1372.
- p -Anisoyl- p -toluoylmethane**, 250.
- p -Anisyliodoacetylchloride**, 193.
- p -Anisyl α -bromo- p -methylstyryl ketone**, 250.
- p -Anisyl $\alpha\beta$ -dibromo- β -*p*-tolylethyl ketone**, 250.
- α -Anisyl 6-hydroxy-2:3-benzostyryl ketone**, 818.
- α -Anisyl 6-methoxy-2:3-benzostyryl ketone**, 818.
- p -Anisyl p -methylstyryl ketone**, 250.
- p -Anisyl- p -tolylisoaxazoles**, 251.
- Anisyltrimethoxyphenylacrylic anhydride**, 200.
- α - p -Anisyl- β -(3:4:5-trimethoxyphenyl)acrylic acid**, and its esters, 199.
- α - p -Anisyl- β -(3:4:5-trimethoxyphenyl)ethane, α -cyano-, 200.**
- α - p -Anisyl- β -(3:4:5-trimethoxyphenyl)ethylene, α -cyano-, 200.**
- α - p -Anisyl- β -(3:4:5-trimethoxyphenyl)propionic acid**, and its *p*-phenylphenyl ester, 200.
- β - p -Anisyl- γ -(3:4:5-trimethoxyphenyl)propylamine**, and its derivatives, 200.
- Annual General Meeting**, 479.
- Anthranilic acid**, 5-chloro-4-nitro-, methyl ester, 285.
- Anthraquinone**, 1:3:8-trihydroxy-, and its acetyl derivative, 427.
- Anthraquinone-1-carboxylic acid**, 6-chloro-, 1475.
- N-2-Anthrylauramine**, and its hydrochloride, 463.
- Antimalariols**, 314, 1164.
- Antiplasmodial action** and chemical constitution, 1307, 1315.
- Arabic acid**, constitution of, 74, 79, 1035.
- Aromatic compounds**, polycyclic, formation of, from unsaturated ketones, 636.
 structure of, 446, 819.
- o*-Aroylaceetoarenes**, conversion of, into *o*-hydroxy-diaroylmethanes, 1499.
- Arsanthen dichloride**, preparation of pure, 1188.
- Arsenic**, 3-covalent, stereochemistry of, 1184.
- Aryl isocyanodichlorides**, reactions of, 191.
- Arylamines**, reaction of, with benzoin, 347.
- Arylazo-bis-oximes**, constitution of, 653.
- Arylhydrazines**, reaction of, with halogenated aldehydes, 813.
- Arylhydrazones**, nitro-, mol. wts. of, 166.
- Aryl nuclei**, union of, 1284.
- Arylpyridines**, 349, 355, 358, 1279.
- Aryliothiocarbimides**, action of chlorine on, 191.
- d-Asparagine**, preparation of, 1489.
- Aspartic acid**, ethyl ester, and its derivatives, 1490.
- d-Aspartic acid**, preparation of, and its derivatives, 1489.
- Aspidospermine from *Vallesia* species**, 1051.
- Atoms**, report of Committee on, 1416.
- Atomic weights**, report of Committee on, 475.
 table of, 478.
- Atropic acid**, methyl ester, action of Grignard reagents on, 840.
- Auramine**, derivatives of, 461.
- Auramine dyes**, *N*-substituted, absorption spectra of, 461.
- Azo-dyes**, aluminium lakes of, 603.
 copper lakes of, 608.
 vanadium lakes of, 1064.
- Azo-groups** as chelating group, 653.

B.

- Bacteria**, growth of, physical chemistry of, 1565, 1573.
- Bacterium lactis aerogenes***, effect of phenol on death rate of, 1573.
- effect of toxic substances on growth, population, and fermentation of, 1565.
- Beckeol**, structure and synthesis of, 425.
 synthesis of, 1208.
- Balance sheets**, 494.
- Banana starch**. See under Starch.
- Barbituric acid**, spectrum of, absorption ultra-violet, 1275.
- Barium**, determination of, volumetrically, with barium rhodizonate, 401.
- Bases**, aromatic, complex, formation of, with poly-nitro-compounds, 1539.
 dissociation constants of, 1451.
- Basic acid**, constitution of, and its derivatives, 713.
- Benzaldehyde**, reaction of, with acetophenone, 1295.
- Benzaldehyde**, *o*-bromo-, 2:4-dinitrophenylhydrazone, 449.
 hydroxy-derivatives, absorption spectra of, 1351.
p-substituted derivatives, depolarisation potentials of, with dropping mercury cathode, 692.
- Benzaldehydephenylmethylhydrazone**, m.p. of, 170.
- p*-Benzamidoacetanilide**, and nitroso-, 368.
- p*-Benzamidophenylpyridines**, 373.
- Benzanthracene photo-oxides**, 1125.
- 1:2-Benzanthracene**, 10-bromo-, and its picrate, 410.
- 1:2-Benz-10-anthramide**, 410.
- 1:2-Benzanthranyl-10-acetaldehyde**, and its derivatives, 411.
- 1:2-Benzanthranyl-10-acetic acid**, α -hydroxy-, 411.
- 1:2-Benzanthranyl-10-glyoxylic acid**, 411.
- Benzanthrone**, 6:13-dichloro-, and 13-chloro-6-amino-, 1475.
- Benzanthrones**, 13-halogeno-, nitration of, 1474.
- 5:6-Benz-4-carboline**, 3-chloro-, 316.
 3:10-dichloro-, 317.
- Benzene**, and chloro-, and nitro-, dielectric constants of, 894.

- Benzene**, 2:6-dichloro-, and 2:4:6-trihalogenonitro-, reactions of, with mercaptide reagent, 1525.
o-chloronitro-, and chloro-2:4-dinitro-, complex formation of, with diphenylamine, 1541.
 1:2:3:4-tetrahydroxy-, derivatives of, 1092.
Benzeneazo- β -dichloro-4 α -butylene, 2:4-dibromo-, 815.
Benzeneazo- β -naphthol, *o*-hydroxy-, aluminium derivatives of, 606.
 vanadium derivatives, 1068.
Benzeneazo- α -naphthol-4-sulphonic acid, copper salt, 611.
Benzeneazo- β -naphthol-6-sulphonic acid, 2'-hydroxy-, vanadium derivative, 1069.
Benzeneazo- β -naphthylamine, 2'-hydroxy-, copper salts, 612.
 vanadium derivatives, 1068.
Benzeneazoresorcinol, *o*-hydroxy-, vanadium derivative, 1068.
Benzenediazonium salts, *p*-hydroxy-, decomposition of, by alcohols, 1150.
Benzenesulphinic acid, potassium hydrogen salt, 862.
4-(Benzesulphonamido)benzenesulphonyl)piperazine-1-carboxylic acid, 4-*p*-acetyl derivative, ethyl ester, 204.
2-Benzenesulphonamidopyridine, 3'-amino-4'-hydroxy-, 3'-nitro-4'-amino-, and its acetyl derivative, and 3'-nitro-4'-hydroxy-, 203.
1-Benzenesulphonylpiperazine, 1-*p*-amino-, 204.
4-Benzenesulphonylpiperazine-1-carboxylic acid, 4-*p*-amino-, and its acetyl derivative, ethyl esters, 204.
Benzhydryl chloride, hydrolysis of, in acetone, 920.
m-chloro-, halogen exchange between halide ions and, in sulphur dioxide solution, 1017.
 halides, hydrolysis of, in aqueous acetone, 966.
 nucleophilic substitution of, in sulphur dioxide solution, 1011.
3:4-Benzocoumarin, 7-hydroxy-, 1395.
5:6-Benzofavylium chloride, 2'-hydroxy-, 818.
Benzoin, resolution of, 336.
Benzoins, reaction of, with arylamines, 347.
d- and *l*-**Benzoins**, δ -(*o*-phenylpropyl)semicarbazones, 337.
Benzonitrile, 2-chloro-4-nitro-, 1523.
Benzonitriles, mobility of groups in, 1521.
 ρ -Benzquinone, detection of, colorimetrically, 1374.
 4-oxime, 2-bromo-, 2-fluoro-, and 2-iodo-, derivatives of, 812.
 ρ -Benzquinone tetrahalogeno-derivatives, action of pyridine on, 1378.
 σ -Benzquinonebisphenylimines, 4:2' and 4:4'-di-fluoro-4' and 2'-hydroxy-, 207.
 σ -Benzquinone-1-phenylimine, 4:2'-difluoro-4'-hydroxy-, acetylation of, 206.
3:4-Benz-1:2:10:11-tetrahydrofluorenone, 1327.
3:4-Benz-1:2:10:11-tetrahydrofluorenone-1-carboxylic acid, 1326.
 γ -Benzoylbutyric acid, 5-chloro-4-nitro-2-amino-, 2-acetyl derivative, 285.
 γ -4-nitro-2-amino-, 2-acetyl derivative, 285.
Benzoylcholine iodide, 422.
6-Benzoylcoumarin-3-carboxylic acid, 5-hydroxy-, 247.
***N*-Benzoyl-2:6'-dimethylidiphenylamine-2'-carboxylic acid**, and its methyl ester, 273.
***N*-Benzoylidiphenylamine-2-carboxylic acid**, 4:6-di-chloro-, and its methyl ester, 273.
***N*-Benzoyl-4:4'-dipiperidyl perchlorate**, 1312.
Benzoyl-2-hydroxy-1-naphthoylmethane, 1500.
2- β -Benzoyl- α -2'-methoxy-1'-naphthylethylcyclohexanone, 2- β -*o*-hydroxy-, 818.
***N*-Benzoyl-6-methylidiphenylamine-2'-carboxylic acid**, and its methyl ester, 272.
***N*-Benzoyl-6'-methylidiphenylamine-2'-carboxylic acid**, 2-chloro-, and its brucine salt and methyl ester, 274.
- Benzoyl- β -naphthoylmethane**, 250.
3-Benzoyloxycholestan-4-one 5:6-oxide, 63.
5-Benzoyloxytoluene, 2-hydroxy-, 330.
3:4-Benz-1-phenanthraldehyde, and its semicarbazone, 297.
3:4-Benz-2-phenanthraldehyde, and its semicarbazone, 1162.
3:4-Benzphenanthramides, 1160.
3:4-Benz-1-phenanthranilide, 297.
3:4-Benzphenanthrene, 1- and 2-alkyl derivatives of, 1159.
3:4-Benz-1-phenanthroic acid, ethyl ester, 1161.
3:4-Benz-2-phenanthroic acid, and its methyl ester, 297.
3:4-Benz-2-phenanthronitrile, 1161.
3:4-Benz-2-phenanthryldimethylcarbinol, 298.
Benzpinacol, action of potassium on, 251.
Benzyl radical in synthesis of methylated sugars, 453.
4-Benzylaminoazobenzene-4'-arsonic acid, 577.
 τ -Benzyldeoxybenzoin, and its 2:4-dinitrophenylhydrazone, 843.
 ω -Benzylideneacetophenone, 4-chloro-, 1295.
4:6-Benzylidene-2- and 3-hydrazino- α -methylaltrosides, 321.
Benzylideneephthalimidine, 3-cyano-, and 1-imino-3-cyano-, 1078.
2-Benzylidene- α -tetralone, 638.
4-Benzyl-2-methyresorcinol, 247.
6-Benzoyloxy-2-methoxyacetophenone, 1373.
Beryllium sulphate, hydrolysis of, 582.
NN'-Bis-(5'-aminoamyl)benzidine, and its tetrahydrochloride, 1319.
 $\omega\omega'$ -Bis-2'-amino-4'-thiazolylalkanes, synthesis of, 1304.
1:4-Bis-2'-amino-4'-thiazolyl-*n*-butane, and its dihydrochloride, 1305.
1:10-Bis-2'-amino-4'-thiazolyl-*n*-decane, and its dihydrochloride, 1306.
1:6-Bis-2'-amino-4'-thiazolyl-*n*-hexane, and its dihydrochloride, 1305.
1:8-Bis-2'-amino-4'-thiazolyl-*n*-octane, and its dihydrochloride, 1306.
1:10-Bis(isoamylaminodecane, and its dihydrochloride, 1320.
NN'-Bis-(5'-benzamidoamyl)benzidine di-p-toluene-sulphonate, 1319.
Bis-(*p*-bromophenylthiocarbimide) oxide, 193.
1:4-Bis(chloroacetyl-*n*-butane, 1305.
1:6-Bis(chloroacetyl-*n*-hexane, 1305.
Bis-($\beta\beta\beta$ -trichloro- α -hydroxyethyl) selenide and sulphide, 832.
1:4-Bis(diazoacetyl-*n*-butane, 1305.
1:1'-Bis-(β -diethylaminoethyl)dipiperidyls, and their tetrapicrate, 1319.
1:10-Bis-(γ -diethylaminopropylamino)decane, 1320.
1:8-Bis-(γ -diethylaminopropylamino)hexane, and its hydrobromide, 1320.
NN'-Bis-(γ -diethylaminopropyl)benzidine, and its tetrahydrobromide, 1319.
Bis-(*p*-dimethylaminophenyl)methane, action of nitrous acid on, 1288.
 $\alpha\alpha$ -Bis(ethylsulphonyl)propane, and its derivatives, 1564.
 $\alpha\alpha$ -Bis(ethylsulphonyl)propane, γ -chloro-, 1562.
 γ -iodo-, 1563.
1:1-Bis(ethylsulphonyl)cyclopropane, 1563.
 $\alpha\alpha$ -Bis(ethylsulphonyl)-4 α -propene, and γ -hydroxy-, 1551.
 $\alpha\alpha$ -Bis(ethylsulphonyl)-4 β -propene, γ -bromo-, 1563.
 $\alpha\beta$ -Bis(ethylsulphonyl)-4 α -propene, 1556.
Bis(ethylsulphonyl)propionic acid, 1565.
 $\alpha\alpha$ -Bis(ethylthio)- β -*n*-butylthiopropane, 1558.
 $\alpha\alpha$ -Bis(ethylthio)propane, γ -chloro-, and γ -hydroxy-, 1551.

- aa*-Bis(ethylthio)- Δ^{α} - and - Δ^{β} -propene, 1551.
a β -Bis(ethylthio)- Δ^{α} -propene, 1555.
NN'-Bisnitrosoacetylbenzidine, 1383.
Bis-*NN'*-phenylcarbamyl-*ar*-octahydrodinaphthylene, 202.
Bis(phenylthiocarbimide) oxide, 193.
4,4'-Bis(β -piperidino- α -hydroxyethyl)diphenyl, 1317.
Bis(propylphosphine)cadmium-mercury, *dibromodi-*
iodo-, 1234.
1:10-Bis-*p*-toluenesulphonylaminodecane, 1320.
1:6-Bis-*p*-toluenesulphonylaminohexane, 1319.
Bis(tolylthiocarbimide) oxides, 193.
Bis(*tri-n*-butylphosphine)- μ -di-iodocadmium-mercury,
diido-, 1233.
Bis(*tri-n*-propylarsine)- μ -dibromopalladium-mercury,
diromo-, 1234.
Bis(triethylphosphine)- μ -dibromocadmium-mercury,
diromo-, 1234.
Bis(*tri-n*-propylphosphine)- μ -di-iodocadmium-mercury,
diido-, 1233.
Bis(triethylphosphine)mercury, *diido*-, 1234.
Bordeaux extra, adsorption of, at mercury-water
interfaces, 596.
Brein, and its derivatives, 798.
Bromine :—
Hydrobromic acid, addition of, to non-terminal
double bonds, 68.
Butaldehyde, *aa* $\beta\beta$ -tetrachloro-, *N*-acetyl-2:4-dibromo-
phenylhydrazone, 816.
n-Butyl alcohol, reaction of, with phosphorus chlorides
and oxychloride, 1464.
n-Butyl bromide, substitution of, with water and
anions in formic acid solution, 940.
tert-Butyl bromide, hydrolysis of, in acetone, 913, 960.
 in aqueous formic acid, 945.
 in aqueous solution, 925.
 olefin elimination from, 899.
 chloride, substitution of, with water and anions in
formic acid solution, 935.
a-*n*-Butyl adipic acid, 640.
Butylaminoacetic acids, and their derivatives, 1292.
4-Butylaminoazobenzene-4'-arsonic acids, 577.
sec.-Butylaniline, 576.
5-*n*-Butyl-1:2-benzanthracene, 304.
4-*sec*.-Butylcarbinylaminoazobenzene-4'-arsonic acid,
577.
sec.-Butylcarbinylaniline, 576.
5-*n*-Butyl-7:8-dihydro-1:2-benzanthracene, 304.
2-*n*-Butylcyclopentanone, and its semicarbazone, 641.
sec.-Butylpyridinium ferrocyanide, 229.
n-Butylquinolinium chloroplatinate, 225.
a-*n*-Butylthiopropaldehyde, and its 2:4-dinitrophenyl-
hydrazone, 1558.
Butyric acid, *d*- β -chloro- β -nitroso-, *l*-menthyl ester,
circular dichroism and rotatory dispersion of,
784.
6-Butyrylcoumarin-3-carboxylic acid, 5-hydroxy-, 246.
- C.
- Cadmium halides, arsine and phosphine derivatives,
1209.
Calythrone, and its salts and derivatives, 412.
d-*iso*Camphane, 347.
Camphor δ -(*a*-phenylethyl)- and δ -(*a*-phenylpropyl)-
semicarbazones, 338.
Camphor, *a*-nitro-, mutarotation of, in chlorobenzene
solution, 1202.
Cannabidiol from Egyptian hashish, and its bis-3:5-di-
nitrobenzoate, 649.
Cannabinol, structure of, 649.
 synthesis of, 1393.
Cannabis indica, 649, 1118, 1121, 1393.
- o*-Carbamylbenzoylacetic acid, and its methyl ester,
1074.
 β -*o*-Carbamylphenylpropionic acid, β -hydroxy-, 1075.
2-Carbamyl-1-thionaphthen, 3-hydroxy-, 327.
Carbanilide, chloronitroso-derivatives, 367.
nitroso-, 367.
o-Carbethoxy- γ -acetyl-*a*-phenylbutyric acid, ethylester,
849.
o-Carbethoxybenzyl chlorosulphinate, 228.
o-Carbethoxybenzylpyridinium ferrocyanide, 228.
o-Carbethoxyethyl *n*-butyl sulphite, 227.
carbonate, 230.
o-Carbethoxyethylquinolinium chloroplatinate, 225.
 β -(*a*-Carbethoxyethylthio)crotonic acid, ethyl ester,
1386.
o-(*a*-Carbethoxyethylthio)ethylidenemalonic acid, ethyl
ester, 1386.
Carbethoxymethylenephthalimidine, 3-cyano-, 1078.
 β -Carbethoxymethylthiocrotonic acid, ethyl ester, 1386.
5-Carbethoxy-2-phenyl-5-methylcyclohexanone-6- β -
propionic acid, ethyl ester, 850.
Carbinolamines from naphthalene and quinoline, 1307.
o-Carboxenzyloxyamido- δ -ketohexoic acid, ϵ -chloro-,
benzyl ester, 709.
Carboxenzyloxcystine, β -bromoethyl ester, 424.
Carboxenzyloxcysteinyl choline iodide, 424.
Carboxenzyloxyphenylalanylcholine iodide, 425.
N-Carboxenzyloxythyronine, 1103.
Carbohydrates, sulphuric esters of, 1475.
4-Carboline, derivatives of, 314.
Carbon atoms, saturated, substitution at, 913, 920,
923, 935, 940, 945, 949, 956, 960, 966, 971, 974,
979, 1011, 1017.
reaction of, with water vapour, 177.
rings, fused, 720, 727.
Carbon tetrachloride, adsorption of, 159.
 dielectric constant of, 894.
 monoxide, preparation of, from carbonates, 213.
Carbonyl compounds, condensations of, 1295.
N- γ -(*o*-Carboxybenzamido)propylanilinesulphonic acid,
691.
o-Carboxybenzeneazo- β -naphthol, vanadyl complex,
1068.
2'-Carboxybenzeneazo-*a*-naphthol-4-sulphonic acid,
cupric salts, 611.
2'-Carboxybenzeneazo- β -naphthylamine, copper salts,
612.
6-Carboxy-3:4-dimethoxyphenylpropionic acid, *a* β -di-
bromo-, 1209.
Carboxyl ions, polar effect of, 956.
3-Carboxymethylenephthalimidine, methyl ester, 1074.
2-Carboxyphenylthiolacetamide, 326.
Carenes, condensation of, with maleic anhydride, 702.
Catalysis, acid, in non-aqueous solvents, 1202.
 by metallic chlorides, of styrene polymerisation, 775.
Catalysts, platinum, poisoning of, by metals, 469.
 hydrogenation, preparation of, 1130.
Catalytic dehydrogenation, elimination of methyl
groups in, 1127.
 toxicity. See under Toxicity.
Cellulosazone, derivatives of, 1479.
Chabasite, adsorption by, 164.
Chalkones, 247, 817.
Charcoal, sugar, adsorption by, 159.
Chelation in potassium salts of carboxylic and sul-
phinic acids, 859.
Chemotherapeutics, lipophilic, synthesis of, 576.
Chloral cyanohydrin, phenylurethane, action of
alkalis on, 1512.
Chlorine, photo-expansion of, 394.
 reaction of, with nitric oxide, inhibition of, 823.
Chloroform, adsorption of, on chromic oxide, 19,
162.
 dielectric constant of, 894.

- Chlorosulphinic acid, esters, 218.
 decomposition of, 463.
 Chlorosulphonic acid, esters, 218.
 $\Delta^{4\beta}$ -Cholestadien-3(β)-ol, preparation of, 66.
 $\Delta^{2\beta}$ -Cholestadien-3-ol-4-onyl-6:6'-($\Delta^{4\beta}$)-cholestadien-4'-ol-3'-one), and its derivatives, 65.
 $\Delta^{4\alpha}$ -Cholestadien-3-one 2:4-dinitrophenylhydrazone, 67.
 Cholestan-3:4-dione, and its derivatives, 64.
*epi*Cholestanol, 1392.
 Cholestanyl phenylurethane, 1487.
 Δ^5 -Cholestene-3:4-diones, and their derivatives, 63.
*epi*Cholesteryl benzoate, 1392.
 4-Cholesterylaminoazobenzene-4'-arsonic acid, 577.
 Choline, esters of, and their oxytocic activity, 419.
d-isochondrodendrine, salts, 745.
Chondrodendron candidans, *microphyllum*, and *platyphyllum*, alkaloids from, 737.
 Chondrofoline, and its salts, 742.
 Chromium :—
 Chromic oxide, adsorption by, of chloroform, 19, 162.
 Chromones of naphthalene series, 1499.
 2-Cinnamoyloxy-4-methoxyacetophenone, 1500.
 Cinnamyl alcohol, action of, with ethyl acetoacetate, 1266.
 Claisen's condensation, mechanism of, 216.
 Coal, composition of, and its extraction with quinoline, 866.
d-isoCoclaurine, and its hydrochloride, 744.
 Colchicine, and its derivatives, 194, 198.
 Colchinol methyl ether, carbinol form, and its derivatives, 197.
 Congo-red, adsorption of, at mercury-water interfaces, 596.
 Constitution, and antiplasmoidal action, 1307, 1315.
 and physical properties, 171, 1528.
 Copper lakes of azo-dyes, 608.
 Crotonaldehyde, $\alpha\beta$ -di-chloro-, 2:4-di-bromo-, and 2:4-dichloro-phenylhydrazones, and their acetyl derivatives, 816.
 Crotonic acid, addition of hydrogen bromide to, 68.
 Crotonylideneacetone semicarbazone, 641.
 Crotonylideneoctocyclopentanone semicarbazone, 640.
 Curare alkaloids, 737.
dl- α -Curcumene, synthesis of, and its nitrosate, 451.
 Cyano-esters, saturated and unsaturated, 1528.
 Cyanogen :—
 Hydrocyanic acid, studies on, 407.
 tetrapolymer of, 1206.
 Cysteol choline iodide hydriodide, 424.
- D.
- Deamination, 207.
 trans-Decalin-2:3-diol, 726.
 Dehydro- β -amyrenol, and its benzoate, 236.
 Dehydrobassic acid, methyl ester, and its derivatives, 717.
 Dehydrogenation, 1127, 1134, 1139.
 Dehydromalaccol, 313.
 Dehydro- α -zymostenol, 1489.
 Deoxyguilliauc acid, and its derivatives, 616.
Derris malaccensis, constituents of, 1178.
 malaccol from, 309.
 3:4-Diacetoxyl- $\Delta^{3\beta}$ -cholestadiene, 64.
 4:4'-Diacytildiphenyl, 4:4'-*di*- ω -chloro-, 1317.
 Diacetyl-2:6-naphthlenediamine, 382.
 $\alpha\beta$ -Diacetylphenyl- α -tolylhydrazine, 335.
 Diacetyltartric acid, ethyl ester, rotation of, in various solvents, 291.
m-Dialkylaminobenzaldehydes, condensation products of, with reactive methylene groups, 57.
- 3-Diallylamino- α -4'-nitrophenylcinnamonnitrile, 58.
 Diamylaminomethoxy-6-methoxy-4-quinolylcarbinols, and their dipicates, 1313.
 Diamylaminomethyl-4-quinolylcarbinol dipicrate, 1312.
 $\alpha\alpha$ -Dianisylacetic acid, preparation of, 834.
 $\alpha\beta$ -Di-*p*-anisylbutane, $\alpha\beta$ -*dihydroxy*-, preparation of, 834.
 $\alpha\alpha$ -Dianisyl- β -butanone, preparation of, 834.
 $\alpha\alpha$ -Dianisyl- α -ethylacetalddehyde, preparation of, 834.
 $\alpha\alpha$ -Dianisyl- β -ethylbutane, β -hydroxy-, preparation of, 835.
 Diaryls, asymmetrical, preparation of, 208.
 Diazo-groups, replacement of, by hydrogen, 207.
 1:4-Dibenzene sulphonylpiperazine, 1:4-*di*-*p*-amino-, and its acetyl derivative, 204.
 Dibenzoyl-4:4'-dipiperidyl, 1312.
 Dibenzoyldisulphone, 832.
 Dibenzopyran derivatives, synthesis of, 1118.
 Dibenzyl disulphide, reaction of, with sulphuryl chloride, 641.
 3'-Dibenzylaminostilbene, 2:4-dinitro-, 58.
 2:3-Dibenzyl 4:6-benzylidene β -methylgalactoside, 1148.
 2:3-Dibenzyl 4:6-benzylidene α -methylglucoside, 454.
 2:3-Dibenzyl 4:6-dimethyl β -methylgalactoside, 1148.
 2:3-Dibenzyl 4:6-dimethyl α -methylglucoside, 455.
 Dibenzylmethylecarbinol, 821.
 2:3-Dibenzyl β -methylgalactose, 1148.
 2:3-Dibenzyl α -methylglucoside, 454.
l-Dibornyl, 347.
 Di-*n*-butoxyphosphorus chloride, 1466.
 Di-*n*-butoxyphosphoryl chloride, 1466.
 Dibutylaminomethyl-6-methoxy-4-quinolylcarbinol, and its salts, 1313.
 3-Dicarbethoxymethyleneephthalimidine, 1074, 1079.
 3-Dicarbethoxymethyleneephthalimidine, 1-imino-, hydrochloride, 1078.
 Di-(β -diethylaminoethyl)carbobenzoyloxycystine di-methiodide, 423.
 Dielectric constants and polarisation of alcohols, 888.
 Dienes, conjugated, spectra of, absorption, effect of molecular environment on, 1453.
 Diethanolaminomethyl-1-naphthylecarbinol picrate, 1310.
 2:5-Dioxy-5'-methylidiphenyl, 2'-cyano-, 1120.
 Diethyl *n*-butyl phosphate, 1467.
 N^4 -Diethylaminoalkyl- N^1 -dialkylsulphanilamides, 686.
 N - β -Diethylaminoethylacetanilide, 691.
 N^4 - β -Diethylaminoethyl- N^4 -acetyl- N^1 -dimethylsulphamamide, 688.
 3- β -Diethylaminoethylamino-5:6-benz-4-caroline, and its dihydrobromide, 316.
 3- β -Diethylaminoethylamino-1:4-dimethylcarbolinium disalicylate, 316.
 3- β -Diethylaminoethylamino-1-methyl-5:6-benz-4-caroline dihydrochloride, 317.
 β -Diethylaminoethylaminomethyl-5:6:3':2'-pyridoquinolines, and their salts, 1166.
 2- β -Diethylaminoethylamino-4-methylquinoline, 6-nitro-, and its salts, 1167.
 4- β -Diethylaminoethylamino-5:6:3':2'-pyridoquinoline, 1168.
 N - β -Diethylaminoethylaniline, 691.
 N^4 - β -Diethylaminoethyl- N^1 -diethylsulphanilamide, and its hydrochloride, 689.
 N^4 - β -Diethylaminoethyl- N^1 -dimethylsulphanilamide, and its hydrochloride, 689.
 N - β -Diethylaminoethylformanilide, 691.
 N^4 - β -Diethylaminoethyl- N^1 -pentamethylenesulphanilamide, and its hydrochloride, 689.
 1:12-Diethylamino-2:11-*d*-hydroxydecane, and its dipicrate, 1318.

- Diethylaminomethyl-6-methoxy-4-quinolylcarbinol dihydrochloride, 1313.
 Diethylaminomethyl-1-naphthylcarbinol, and its picrate, 1310.
 Diethylaminomethyl-4-quinolylcarbinol dipicrate, 1312.
 3-Diethylamino- α -4'-nitrophenylcinnamic acid, 58.
 3-Diethylamino- α -4'-nitrophenylcinnamonic nitrile, 58.
 γ -Diethylaminopropyl chloride, b.p. of, 1320.
 3- γ -Diethylaminopropylamino-1:4-dimethylcarbinolium disalicylate, 316.
 2- γ -Diethylaminopropylamino-4-methyl-5:6:3':2'-pyridoquinoline, and its hydrobromide, 1166.
 4- γ -Diethylaminopropylamino-5:6:3':2'-pyridoquinoline, and its picrate, 1168.
 N⁴- γ -Diethylaminopropyl-N¹-diethylsulphanilamide, 690.
 1- γ -Diethylaminopropyltetrahydroquinoline, and its dipicrate, 1319.
 3'-Diethylaminostilbene, 4-nitro-, 58.
 2 : 4-dinitro-, 58.
 2-m-Diethylaminostyrylbenzthiazole methiodide, 59.
 2-m-Diethylaminostyrylpyridine methiodide, 59.
 Di-n-heptylamine, preparation of, 1314.
 Di-n-heptylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 1314.
 Di-n-heptylbenzylamine, 1314.
 Di-4¹³-cyclohexene, spectrum of, absorption, 1462.
 Di-n-hexylamine, and its derivatives, 1314.
 Di-n-hexylaminomethyl-6-methoxy-4-quinolylcarbinol, and its dipicrate, 1314.
 Di-n-hexylbenzylamine, 1313.
 1:2-Dihydro-3:4-benz-1-phenanthroic acid, 298.
 1:2-Dihydro-1:2-dimethylchrysene, 301.
 Dihydro- α - and - β -dunniones, diacetyl derivatives, 1496.
 Dihydroallodunnione, and its diacetyl derivative, 1498.
 Dihydrohydroxyhydroisunnol, tetra-acetyl derivative, 1497.
 Dihydrohydroxyhydroallodunnione, 1498.
 α - and β -Dihydromiropinic acids, 685.
 Dihydropentindole, 7-chloro-4-nitro-, 285.
 Dihydroproporenic acid A, and its derivatives, 1492.
 Dihydropterocarpin, oxidation of, 793.
 Dihydrosarcostin, and its triacetate, 1445.
 2:11-Diketododecane, 1:12-dichloro-, 1318.
 α -Diketones, steroid, 60.
 2:13-Diketotetradecane, 1318.
 2:13-Diketotetradecane, 1:14-dichloro-, 1318.
 l-Dimethyl, 347.
 2:5-Dimethoxy- n -amylbenzene, 1120.
 $\alpha\beta$ -Di-3-methoxybenzylsuccinic acids, $\alpha\beta$ -di-4-hydroxy-, and their derivatives, 1100.
 $\beta\gamma$ -Dimethoxy- $\alpha\alpha$ -bis(ethylthio)propane, 1563.
 6:7-Dimethoxycarbostyryl, 1209.
 3:4-Dimethoxycinnamic acid, 6-cyano-, 1209.
 4:4'-Dimethoxycinnamic acid, 6-cyano-, 1209.
 2':6'-Dimethoxy-4':5-dimethylazobenzene, 2-cyano-, 1121.
 Dimethoxyflavones, hydroxy-, 1373.
 2:5-Dimethoxy-5'-methyl-4- n -amylidiphenyl, 2'-cyano-, 1121.
 4:6-Dimethoxy-3-methylisobutyrophenone, 2-hydroxy-, and its acetyl derivative, 1208.
 2:5-Dimethoxy-5'-methyldiphenyl, 2'-cyano-, 1120.
 2':4'-Dimethoxyphenyl-4'-cyclohexene-2-carboxylic acid, and its ethyl ester, 1395.
 $\alpha\beta$ -Dimethoxypropaldehyde diethylacetal, 1563.
 Dimethoxyquaterphenyls, 1381, 1384.
 4:4'-Dimethoxystilbenediol diacetate, 1328.
 3:4-Dimethoxystyrene, ω -bromo-6-cyano-, 1209.
 cis- ω -bromo-6-cyano-, 1209.
 9:10-Dimethoxy-1:2:9:10-tetramethyl-9:10-dihydroanthracene, 18.
- 9:10-Dimethoxy-5:6:9:10-tetramethyl-9:10-dihydro-1:2-benzanthracene, 18.
 9:10-Dimethoxy-6:9:10-trimethyl-9:10-dihydro-1:2-benzanthracene, 17.
 4-Dimethylamino-4'-acetamidoazobenzene, 368.
 4-Dimethylaminoazobenzene-4'-arsonic acid, 577.
 Dimethylaminomethyl-1-naphthylcarbinol, 1310.
 3-Dimethylamino- α -4'-nitrophenylcinnamic acid, 58.
 3-Dimethylamino- α -4'-nitrophenylcinnamonic nitrile, 58.
 3'-Dimethylaminostilbene, 4-nitro-, 58.
 2,4-dinitro-, 57.
 2-m-Dimethylaminostyrylbenzthiazole methiodide, 59.
 2-m-Dimethylaminostyrylpyridine methiodide, 59.
 2-m-Dimethylaminostyrylquinoline methiodide, 59.
 2-m-Dimethylaminostyrylthiazole methiodide, 59.
 2:4-Dimethyl 3:6-anhydrogalactonic acid, and its methyl ester, 625.
 2:4-Dimethyl 3:6-anhydrogalactonolactone, 625.
 2:4-Dimethyl 3:6-anhydrogalactose anilide, 625.
 2:4-Dimethyl 3:6-anhydrogalactose dimethylacetal, and its 5-p-nitrobenzoyl derivative, 626.
 2:4-Dimethyl 3:6-anhydro- α -methylaltroside, 322.
 2:4-Dimethyl 3:6-anhydro- α - and - β -methylgalactopyranosides, 624.
 Dimethylaniline, *p*-nitro-, action of nitrous acid on, in hydrochloric acid, 138.
 1:2-Dimethylanthracene, 18.
 5:7-Dimethyl-1:2-benzanthracene, 639.
 6:10-Dimethyl-1:2-benzanthracene, 10-hydroxy-, and its acetyl derivative, 412.
 9:10-Dimethyl-1:2-benzanthracene photo-oxide, 1126.
 5:6-Dimethyl-1:2-benzanthraquinone, preparation of, 17.
 pp'-Dimethylbenzhydryl chloride, hydrolysis of, in aqueous acetone, 974.
 pp'-Dimethylbenzhydrylamine, and its salts, 978.
 2-(2':3'-Dimethylbenzoyl)benzoic acid, 18.
 2-(2':3'-Dimethylbenzoyl)-1-naphthoic acid, 17.
 $\beta\gamma$ -Dimethylbutadiene, polymerides of, 1169.
 4:4'-Dimethylcarbanilide, nitroso-, 367.
 1:2-Dimethylchrysene, and its 1:2-oxide, 300.
 1:2-Dimethylchrysene-7-carboxylic acid, 300.
 1:9-Dimethyl-1-decalol, 1131.
 9:19-Dimethyl-1:2:5:6-dibenzanthracene photo-oxide, 1126.
 5:7-Dimethyl-x:x'-dihydro-1:2-benzanthracenes, 638.
 1:2-Dimethyl-1:2-dihydrochrysene, 1:2-dihydroxy-, 300.
 as-1:1'-(2:2'-Dimethyldinaphthyl)ethane, 298.
 4:6-Dimethyl galactose, synthesis of, 1147.
 4:6-Dimethyl glucose, 453.
 2:3-Dimethyl-4²-cyclohexenone, preparation of, 416.
 1:2-Dimethylcyclohexylacetic acid, synthesis of, and its derivatives, 415.
 1:2-Dimethylcyclohexylacetic acid, 6-hydroxy-, lactone, 417.
 2:3-Dimethylindole, 4-amino-, and 7-chloro-4-nitro-, 285.
 Dimethylmaleic anhydride, and its derivatives, 414.
 2:3-Dimethyl β -methylgalactofuranoside, amide, 1112.
 2:3-Dimethyl β -methylgalactopyranoside, methyl ester, 1509.
 4:6-Dimethyl β -methylgalactoside, 1149.
 4:6-Dimethyl α -methylglucoside, and its 2:3-di-p-toluenesulphonyl derivative, 455.
 2:3-Dimethyl methylglyuronoside, and its derivatives, 1043.
 2:3-Dimethyl mucic acid, derivatives of, 1112.
 1:6-Dimethylnaphthalene, synthesis of, 1239.
 3:4-Dimethylnaphthalene, 1-bromo-, and its picrate, 299.
 3:4-Dimethyl-1-naphthylacetic acid, 299.
 α -1-(3:4-Dimethylnaphthyl)- α -aminocinnamic acid, 300.

- β -1-(3:4-Dimethylnaphthyl)ethyl alcohol, and its chloride, 299.
 α -1-(3:4-Dimethylnaphthyl)- α -nitrocinnamic acid, 300.
cis-1:9-Dimethylcatalin, 1131.
3:3-Dimethylphthalimidine, and its 2-acetyl derivative, 1088.
 $\beta\beta$ -Dimethylpropionic acid, α -cyano-, ethyl ester, refractive index of, 1528.
4:8-Dimethyl-6-propylecoumarin, 7-hydroxy-, 246.
2:3-Dimethyl γ -saccharic acid, derivatives of, 1044.
*N*¹-Dimethylsulphanilamide, 688.
2:2-Dimethyl-3':4':6'-tetrahydrodibenzpyran, 4"-hydroxy-, and its acetyl derivative, and 5"-hydroxy-, 1124.
1:6-Dimethyl-5:6:7:8-tetrahydronaphthalene, 1242.
1:6-Dimethyltetralone 2:4-dinitrophenylhydrazone, 1242.
2:4-Dimethylthiophen-3-carboxylic acid, 5-hydroxy-, 1386.
Dimethyl- ρ -toluidine, action of nitrous acid on, 1289.
2:8-Dimethyl-2-(4':8':12'-trimethyltridecyl)chroman, 6-hydroxy-, 330.
2:5-Dimethyltriphenylcarbinol, 1245.
2:5-Dimethyltriphenylmethane, 1246.
2:5-Dimethyltriphenylmethyl chloride, 1246.
peroxide, 1248.
Dimethyl xylonolactone, 1505.
Dinaphthylmethanes, 2-hydroxy-, 1500.
Dinaphthyline, preparation of, 201.
1:3-Di- α -naphthyl-2-methylpropylene, 821.
1:3-Di- β -naphthyl-2-methylpropylene, 821.
Diophenols, steroid, 60.
Diphenyl, bromonitro-derivatives, 449.
3:4-dinitro-, 211, 474.
4'-nitro-2-hydroxy-, 2-acetyl derivative, 1384.
3-nitrosoamino-, acetyl derivative, 371.
Diphenyl series, 208.
Diphenylamine, complex formation of, with chloronitrobenzenes, 1541.
2:3-Diphenyl-5:6-benziquinoxaline, 3'-amino-, 386.
Diphenylbenzylcarbinol, *di-p*-bromo-, and *di-p*-iodo-, 1328.
Diphenyl- α -bromophenylisooxazole, 449.
Diphenyl-4:4'-dicarboxylic acid, and its chloride, 1317.
Diphenyl- p -diphenylcarbinol, preparation of, 878.
1:3-Diphenyl-2-methylpropylene, 821.
2:7-Diphenylnaphthalene, 382.
Diphenyl- α -naphthylcarbinol, preparation of, 878.
 $\alpha\alpha$ -Diphenyl- β -phenylbromoethylene, $\alpha\alpha$ -*di-p*-bromo-, $\alpha\alpha$ -*di-p*-chloro-, and $\alpha\alpha$ -*di-p*-iodo-, 1328.
 $\alpha\alpha$ -Diphenyl- β -phenylethylene, $\alpha\alpha$ -*di-p*-bromo- and $\alpha\alpha$ -*di-p*-iodo-, 1328.
1:2-Diphenyl-5-pyrrolidone, 2-hydroxy-, and 2-hydroxy-1-*p*-bromo-, 441.
Diphenyl- α -tolylacetic acid, and its derivatives, 885.
Diphenyl- α -tolylcarbinol, preparation of, 885.
Diphenyl- α -tolylmethane, preparation of, 885.
Diphenyl- α -tolylmethyl, radical stability of, 887.
Diphenyl- α -tolylmethyl peroxide, 885.
Diphenyl-*m*-tolylmethyl chloride, 1246.
peroxide, 1248.
 γ -4-Diphenylbutyric acid, 1030.
4-Diphenylpropylperidinomethylcarbinol, and its derivatives, 1317.
1:14-Dipiperidino-2:13-diketotetradecane, 1318.
1:14-Dipiperidino-2:13-*d*ihydroxy-2:13-dipropyltetradecane, 1318.
1:12-Dipiperidino-2:11-*d*ihydroxydodecane, and its dipicrate, 1318.
Dipole moments, measurement of, solvent effect in, 752, 888.
Dipropylaminomethyl-1-naphthylcarbinol picrate, 1310.
- Dipropylaminomethyl-4-quinolylcarbinol *di*picrate, 1312.
3-Dipropylamino- α -4'-nitrophenylcinnamic acid, 59.
3-Dipropylamino- α -4'-nitrophenylcinnamonic nitrile, 58.
3'-Dipropylaminostilbene, 4-nitro-, 59.
2:4-dinitro-, 58.
2-*m*-Dipropylaminostyrylpypyridine methiodide, 59.
Dipyridylcadmium, *di*bromo- and *di*iodo-, 1217.
Dissociation constants, in relation to activation energies and resonance, 1447.
measurement of, by conductivity titrations, 84.
of salts in water, 87.
thermodynamic, of dibasic acids, 855.
Dithiobenzoyl oxide, 832.
Dithiodiglycolylcholine iodide, 422.
2:3-Di-*p*-toluenesulphonyl 4:6-benzylidene α -methyl-altrioside, 321.
2:6-Di-*p*-toluenesulphonylbenzene, and 4-bromo-, and 4-chloro-, 1527.
 α -Di-*p*-toluylpropane, 452.
 α - and β -5:10-Di-*p*-tolyl-15:10-dihydroarsanthren, preparation and isolation of, and their derivatives, 1189.
2:6-Di-*o*-tolylidenecyclohexanone, 638.
3:5-Di-(*p*-tolylthio)acetanilide, 2- and 4-nitro-, 1527.
3:5-Di-(*p*-tolylthio)aniline, 2- and 4-nitro-, 1528.
2:6-Di-*p*-tolylthionitrobenzene, and 4-bromo-, and 4-chloro-, 1527.
4:6-Di-(*p*-tolylthio)nitrobenzene, 2-chloro-, 1528.
2:3-Ditosyl 4:6-benzylidene β -methylgalactoside, 1149.
2:3-Ditosyl 4:6-dimethyl β -methylgalactoside, 1149.
Ditosyl α -methylgalactopyranoside, 624.
2:3-Ditosyl β -methylgalactoside, 1149.
n-Dodecyl alcohol, action of, on α - and β -naphthylamine hydrochlorides, 388.
4-*n*-Dodecylaminoazobenzene-4'-arsonic acid, 577.
Dodecaniline, 576.
N-Dodecyl- β -naphthylamine, 389.
Duboisia myoporoides, alkaloids of, 1155.
isoDunnio, 1498.
Dunnione, 1493.
 β -*isoDunniones*, bromo-, 1497.
 α and β -*isoDunniones*, and their derivatives, 1496.
alloDunnionesulphonic acid, 1498.
Dyes, adsorption of, at mercury-water interfaces, 596.

E.

- Echinocystic acid, relation of, to quillaic acid, 612.
Electrolytic oxidation, 256.
Elemi resin. See under Resins.
Emodin, *Frangula*-, oxidation of, 427.
Emulsions, stabilisation of, 1513.
water-in-oil, 211.
Ephedrines, nitroso-, 1154.
Epimerisation, 1390.
 $\alpha\beta$ -Epoxy- $\alpha\alpha$ -bis(ethylsulphonyl)propane, 1552.
epineoErgosterol, 1392.
Erythrofleic acid, and its derivatives, 288.
Erythrofleine, and its sulphates, 286.
Erythrophleum alkaloids, 286.
 γ -Ethoxy- $\alpha\alpha$ -bis(ethylsulphonyl)propane, 1551, 1562.
 γ -Ethoxy- $\alpha\alpha$ -bis(ethylthio)propane, 1551.
5-Ethoxy-2:4-dimethylthiophen-3-carboxylic acid, 1386.
1-(Ethoxy-2'-methoxy-1'-naphthylmethyl)coumaran-2-one, 1-bromo-, 819.
5-Ethoxy-2-methyl-4-ethylthiophen-3-carboxylic acid 1386.
5-Ethoxy-2-methylthiophen, 1386.
 γ -4-Ethoxyphenylpyridine, 356.
3-Ethoxythiophen-5-acetic acid, ethyl ester, 1387.
Ethyl alcohol, dielectric constant of, 894.

Ethyl bromide, hydrolysis of, in aqueous formic acid, 945.
 in aqueous solution, 925.
 olefin elimination from, 899.
 carbonate, action of sodium on, 216.
Ethyl ether, ignition of, mixed with oxygen, 143, 151.
4-Ethylaminoazobenzene-4'-arsonic acid, 577.
 α -Ethylaminopropionic acid, and its benzenesulphonyl derivative, 1293.
 p -Ethylbenzaldehyde, preparation of, 701.
10-Ethyl-1:2-benzanthracene, 10- β -hydroxy-, 411.
Ethyl-3:4-benzphenanthrenes, and their picrates, 1160.
5-Ethyl-7:8-dihydro-1:2-benzanthracene, 304.
Ethylene glycol, reaction of, with lead tetra-acetate, 82.
 N^4 -5'-Ethyl-4'-methyl-2'-thiazolylsulphanilamide, 5'- β -hydroxy-, 1307.
Ethylinolinium chlorosulphinate, 226.
 N^4 -Ethylsulphanilamide, 690.
 N^1 -Ethylsulphanilamidoacetic acid, ethyl and methyl esters, 1576.
 α -Ethylsulphonyl- β -n-butylsulphonyl- Δ^{α} -propene, 1558.
Ethylthiol, reaction of, with α -bromopropaldehyde diethyacetal, 1553.
 β -Ethylthiopropaldehyde, 1562.
 α - and β -Ethylthiopropaldehydes, and their derivatives, 1557.
 α -Ethylthio- Δ^{β} -propene, γ -chloro-, 1553.
Eucalyptus oil, carbonyl constituents of, 808.
Eucarvone, 2:4-dinitrophenylhydrazone, 1163.
 reaction of, with maleic anhydride, 1162.
Eudaline, derivatives of, 1145.
Expansion coefficient, thermal, relation of, to structure of solutions, 870.

F.

Faraday Lecture, 511.
Films, unimolecular, on solids, 511, 773.
 on water, ageing of, 128.
 solubility and surface pressure of, 114.
 water evaporation through, 106.
Fish, plants poisonous to, 309, 1178.
Flames, "cool," in relation to normal flames, 143, 151.
Flavone, 5:6:4'-trihydroxy-, 1374.
Flavones, trihydroxy-, derivatives of, 1370.
Fluids, adsorption at interface between, 596.
Fluorene, 2-amino-, 2-p-toluenesulphonyl derivative, 3:7-dibromo-, 3:7-dibromo-2-amino-, and 2-bromo-3-nitro-, and their derivatives, 449.
Formaldehyde, action of nitrous acid on, 142.
Formamide, refractivity of, 869.
Formic acid, action of, on triphenylmethyl chloride and ethyl ether, 1333.
 esters, stability of, 874.
3-Formylbenzophenone, 2:4-dihydroxy-, and its 2:4-dinitrophenylhydrazone, 246.
3-Formylbutyrophenone, 2:4-dihydroxy-, and its semicarbazone, 246.
 N^4 -Formyl- N^4 -ethylsulphanilamide, 690.
3-Formylphenyl benzyl ketone, 2:4-dihydroxy-, and its derivatives, 247.
3-Formylpropiophenone, 2:4-dihydroxy-, and its 2:4-dinitrophenylhydrazone, 246.
Frangula-emodin. See under Emodin.
Fructose methylphenylhydrazone, 1511.
Fuller's herb. See *Saponaria officinalis*.
Fungi, higher, constituents of, 632, 1491.

G.

Galactosazole, derivatives of, 1479.
Galactose sulphates, 1475.
3-Galactosidogalactose from arabic acid, 79.

Gases, adsorption of, by solids, 156.
 micro-analysis of, 1300.
Gentiosiazone hepta-acetate, 1481.
 dl -4²-cycloGeranic acid, resolution of, 418.
Geraniol, action of ethyl acetoacetate on, 704.
Ginkgetin, structure of, 1370.
Glucosaminides, structure of, 29.
Glucose sulphates, 1475.
Glucosides from cyclohexane series alcohols, 243.
Glutamic acid series, 706.
Glutaric acid, thermodynamic dissociation constants of, 858.
Glycerol, phosphorylation of, 752.
Glycylcholine chloride hydrochloride, 421.
Glycylglycylcholine chloride hydrochloride, 421.
Glyoxime NN' -bis-3-bromo-, -3-fluoro-, and -3-iodo-4-methoxyphenyl ethers, 412.
Gold compounds, 4-covalent, stability of, 1235.
Gomberg reaction, modified, 1284.
Guanosine 3- and 5-phosphates, synthesis of, 746.
Guanylic acid, synthesis of, 746.
Gypsogenic acid, and its derivatives, 619.
Gypsogenin, 619.

H.

Hashish, Egyptian, cannabidiol from, 652.
Heat of dissociation, and structure of salt deuterates and hydrates, 72.
Heptamethyl aldobionic acid, methyl ester, from hydrolysis of methylated arabic acid, 74.
4-n-Heptylaminooazobenzene-4'-arsonic acid, 577.
5-n-Heptyl-1:2-benzanthracene, 304.
Heptylbenzylamine, and its hydrochloride, 1314.
5-n-Heptyl-7:8-dihydro-1:2-benzanthracene, 304.
Heterocyclic compounds, nitrogenous, spectra of, absorption ultra-violet, 1275.
 $\Delta^{2:4}$ -Hexadiene, spectrum of, absorption, 1461.
Hexahydrocuminic acid, α -bromo-, and its ethyl ester, 809.
Hexahydronaphthalene, 727.
Hexamethyl 6- β -glycuronosidogalactose, 74.
Hexamethyl 6- β -glycuronosido- β -methylgalactopyranoside, amide of, 78.
Hexamethylnaphthidineammonium diiodide, 202.
cycloHexane series, alcohols of, 243, 280.
cycloHexanone, 4-hydroxy-, and its acetyl derivative, 13.
3:4-cycloHexenocoumarin, 6-hydroxy-, and its acetyl derivative, and 7-hydroxy-, acetyl derivative, 1123.
cycloHexyl alcohols, epimeric, parachors of, 280.
n-Hexylaminoacetic acid, benzenesulphonyl derivative, 1294.
4-n-Hexylaminoazobenzene-4'-arsonic acid, 577.
4-cycloHexylaminoazobenzene-4'-arsonic acid, 577.
5-n-Hexyl-1:2-benzanthracene, 304.
n-Hexylbenzylamine, and its hydrochloride, 1313.
5-n-Heptyl-7:8-dihydro-1:2-benzanthracene, 304.
cycloHexylideneacetaldehyde, preparation of, 14.
Homopterocarpin, 787.
Hormones, pituitary, posterior, oxytocic, chemistry of, 419.
 sex, substances of type of, 721, 727.
Hydrazides, acid, association of, 332.
Hydrazine, determination of, potentiometrically, in alkaline solution, 673.
Hydrobromic acid. See under Bromine.
Hydrocarbons, aromatic, complex formation of, with polynitro-compounds, 1539.
 polycyclic, 16, 293, 303, 1125, 1159, 1396.
 optically active, saturated, solvent effects with, 345.
Hydrocyanic acid. See under Cyanogen.
Hydroisodunnol, hydroxy-, 1497.

Hydrogen atoms, associating effect of, 166, 332.
reaction of, with oxygen, sensitised by nitrous oxide, 464.
replacement of diazo-groups by, 207.
Hydrogen bridge, effect of solvent on strength of, 850.
Hydrolysis of salts in solution, 578.
Hydronaphthalenes, catalytic dehydrogenation of alcohols and ketones from, 1134.
Hydroxides, precipitation of, electrometric studies of, 758, 761.
Hydroxy-aldehydes, spectra of, absorption, and of their methyl ethers, 1347.
Hydroxy-ketones, spectra of, absorption, and of their methyl ethers, 1347.
Hydroxylamine, determination of, potentiometrically, in alkaline solution, 673.
Hydroxyl groups, replacement of, by chlorine atoms, 218.
 α -Hydroxy-sulphones, rearrangement of, and its reversibility, 442.

I.

2-Imino-5-methylthiazolidine, resolution of, and its salts, 338.
Iminophthalimidine, condensations of, 1073.
Immunochemistry, synthetic, 119.
Indigo-carmine X, adsorption of, at mercury-water interfaces, 596.
Indole group, structure in, 283.
Indole series, synthesis in, 458.
Indolyl-3-acetic acid, α -amino-, methyl ester, 460.
 γ -3-Indolylglycine, synthesis of, 458.
Indolyl-3-glycolic acid, methyl ester, 460.
Indolyl-3-glyoxylic acid, synthesis of, and its derivatives, 458.
 α -Indophenol, *mm'*-difluoro-, acetylation of, 206.
Iodine, reaction of, with phosphorus in carbon tetrachloride, 583.
Periodates, electrolytic formation of, 256.
Ionisation in non-aqueous solvents, 1329, 1360.
 β -Ionone, reaction of, with halides in presence of lithium, 1239.
Isotopes, exchange of, in organic compounds, 1362.

K.

Ketoacetyl dihydro-oleanolic acid, methyl ester, 1389.
Ketoacetyl oleanolic acid, lactone, 1389.
 α -Ketobutaldehyde, β -bromo-, 2:4-dibromo- and -di-chloro-phenylhydrazone, 814.
6-Keto-5-carbethoxy-2-methylcyclohexylacetic acid, ethyl ester, 417.
7-Keto- Δ^{25} -cholestadiene, and 6-mono-, and 4:6-di-bromo-, 663.
7-Ketocholestanyl acetate, 5:6-dibromo-, 662.
7-Keto- Δ^6 -cholestene, 3:4:6-tribromo-, 663.
7-Ketocholesteryl acetate, bromination of, 659.
3-Keto-3:4-dihydro-5:6-benz-4-carboline, 10-chloro-, 317.
7-Keto-3:4-dimethylcyclohexylacetic acid, ethyl ester, 417.
 α -8-Keto-1:2-dimethylcyclohexylacetic acid, and its derivatives, 417.
1-(2'-Keto-1'-cyclohexyl-2''-methoxy-1''-naphthyl-methyl)coumaran-2-one, 819.
2-Keto-5-hydroxy- $\alpha\beta$ -dicyclohexylidene-ethane, and its derivatives, 14.
Ketolupenyl acetate and benzoate, and their derivatives, 1337.
3-Keto-10-methoxy-1-methyl-3:4-dihydro-4-carboline, 318.

Ketomethoxymethylhexahydrochrysene, 732.
Ketomethoxymethyloctahydrochrysene, 733.
1-Keto-7-methoxy-2-methyl-1:2:3:4-tetrahydrophenanthrene, preparation of, 730.
3-Keto-2-methyl-5:6-(3':4':6'-O-acetylglucopyrano)-tetrahydro-1:4-oxazine, 437.
1-Keto-2-methyl-2-ethyl-1:2:3:4-tetrahydrophenanthrene, and its picrate, 1278.
3-Keto-2-methyl-5:6-glucopyranotetrahydro-1:4-oxazine, 436.
2-Keto-1-methylcyclohexylacetic acid, and its derivatives, 417.
1-Keto-2-methyl-1:2:3:4-tetrahydrophenanthrene, preparation of, 731.
Ketones, condensation of, with phenols, 1103.
unsaturated, cyclodehydration of, 636.
16-Keto- $\Delta^{12:13}$ -oleanene, 1472.
16-Keto-oleanolic acid, methyl ester, 1472.
1-Keto-7-phenyl-1:2:3:4-tetrahydronaphthalene, 1030.
5-Keto-1:2:3:4-tetramethyl-5:6:7:8-tetrahydroanthracene, and its semicarbazone, 302.
5-Keto-1-p-toluenesulphonyl-2-acetylpyrrolidine, and bromo-, 710.
5-Keto-1-p-toluenesulphonyl-2-chloroacetylpyrrolidine, 710.
5-Keto-1-p-toluenesulphonylpiperidine-2-carboxamide, 711.
6-Keto-1-p-toluenesulphonylpiperidine-2-carboxylic acid, 709.
4-Keto-1:2:3-trimethyl-1:2:3:4-tetrahydrophenanthrene, 302.
Ketols, preparation of, from benzpinacol and potassium, 251.
Ketonic compounds, stability of, in relation to phenoxyl group, 213.

L.

Lactic acid, trichloro-, ethyl ester, phenylurethane, action of alkalis on, 1512.
 $\Delta\beta,\gamma$ -Lactones, reactions of, 438.
Lanthanum chloride, solubility of, 670.
Lauric acid, β -diethylamino- and β -dimethylamino-ethyl esters, and their hydrochlorides, 421.
phenyl ester, Fries rearrangement of, 835.
Lauryl choline chloride and iodide, 422.
Lectures delivered before the Chemical Society, 119, 511, 544, 554.
Leucadendron, leaves, constituents of, 1271.
Leucodrin, oxidation of derivatives of, with lead tetra-acetate and periodic acid, 1271.
Levans, formed by bacterial action, 237.
Linalool, action of ethyl acetoacetate on, 704.
Linkings, double, non-terminal, addition of hydrogen bromide to, 68.
epiLumisterol, 1392.
Lupanetriol, and its diacetate, 456.
Lupenyl esters, oxidation of, 1335.
2:6-Lutidine, separation of, in mixtures with β - and γ -picolines, 241.

M.

Magnesium carbonate, basic, precipitated, chemical nature of, 96.
Magnesium determination :—
determination of, with 8-hydroxyquinoline, 656.
Malacol from *Derris malaccensis*, 309.
dl-Malacol, 313.
Maleic anhydride, condensation of, with carenes and α -terpinene, 702.
detection of, colorimetrically, 1374.
reaction of, with eucarvone, 1162.
Malonaldehyde bis-2:4-dinitrophenylhydrazone, 1557.

- Malonic acid, bromo-, hydrolysis of ions of, 956.
 Maniladiol, and its derivatives, 797.
l-Matairesinol, synthesis of, 1088.
dl-, *d*-, and *l*-Matairesinols, 1100.
 Meconic acid, mercuration of, 667.
 Melibiosazone hepta-acetate, 1481.
 Memorial Lecture, Sörensen, 554.
l-Menthyl butyl sulphide, 227.
 Mercuricomeric acid, chloro-, and hydroxy-, anhydride of, 667.
 Mercurikojic anhydride, chloro-, and hydroxy-, 669.
 Mercuripyromeconic acid, chloro-, 668.
 Mercuri-*γ*-pyrone, dichloro-, 666.
 Mercurithiophthen, chloro-, 306.
 Mercury, adsorption of dyes at water interfaces with, 596.
 Mercuric halides, arsine and phosphine derivatives, 1209.
 Mercury bisbutylthiol, 1558.
 Mesityl oxide, reduction product of, 1547.
 Metals of the gold group, analysis of, 1263.
 of the tantalum and tungsten group, analysis of, 1258.
 toxicity of, towards catalytic platinum, 469.
 Metallic chlorides, catalysis by, of styrene polymerisation, 775.
 salts, complex, constitution of, 1209, 1230, 1235.
 sulphides, formation of, in ethyl and methyl alcohols, 1329.
 Metanethole, structure of, and *d*bromo-, and *d*nitro-, 1094.
 Methane, tetranitro-, complex formation of, with naphthalenes, 1541.
 Methin[2-benzthiazole][2-(3-ethylidihydrobenzselazole)], and its hydriodide, 804.
 Methin[2-benzthiazole][2-(3-ethylidihydrobenzthiazole)], 803.
 Methin[2-benzthiazole][2-(3-methyldihydrobenzthiazole)], 804.
 Methinycyanines, preparation of bases from, 799.
 Methin[2-(1-ethylidihydroquinoline)][2-(6:7-benzbenzthiazole)], 807.
 Methin[2-(1-ethylidihydroquinoline)][2-benzthiazole], and its hydriodide, 806.
 Methin[2-(1-ethylidihydroquinoline)][2-(4:5-benzthiazole)], 806.
 Methin[2-(1-methyldihydroquinoline)][2-(4:5-benzbenzthiazole)], 806.
 Methin[2-(1-methyldihydroquinoline)][2-benzthiazole], and its hydriodide, 805.
 Methin[2-quinoline][2-(3-ethylidihydro-6:7-benzbenzthiazole)], 807.
 Methin[2-quinoline][2-(3-ethylidihydrobenzthiazole)], and its hydriodide, 805.
 Methin[4-quinoline][2-(3-ethylidihydrobenzthiazole)], 807.
 and its hydriodide, 807.
 Methin[2-quinoline][2-(1-ethylidihydroquinoline)], 808.
 Methin[2-quinoline][2-(3-methyldihydrobenzthiazole)], and its hydrochloride, 805.
 Methin[2-quinoline][2-(1-methyldihydroquinoline)], 808.
 6-Methoxyaceto-2-naphthalide, 1- and 5-nitro-, 387.
 7-Methoxyaceto-2-naphthalide, 1- and 8-nitro-, 386.
 Methoxyacetophenones, spectra of, absorption, 1351.
 Methoxybenzaldehydes, spectra of, absorption, 1351.
 4-Methoxybenzoylcinnamoylmethane, 2-hydroxy-, 1500.
 ω -2'-Methoxybenzoyl-2-hydroxyacetophenone, 1106.
 ω -2'-Methoxybenzoyl-2-hydroxy-5-methylacetophenone, 1106.
 2-(2'-Methoxybenzoyloxy)acetophenone, 1106.
 2-(2'-Methoxybenzoyloxy)-5-methylacetophenone, 1105.
- β -Methoxy- α -bis(ethylsulphonyl)propane, γ -hydroxy-, 1563.
 5-Methoxy-2-carboxy- β -phenoxypropionic acid, 794.
 7-Methoxychroman-3-carboxylic acid, 792.
 7-Methoxy- Δ^3 -chromen-3-carboxylic acid, 794.
 6-Methoxycoumarone-2-acetic acid, and its derivatives, 795.
 6-Methoxycoumarone-2-carboxylic acid, and its ethyl ester, 794.
 Methoxydinaphthoylmethanes, 2-hydroxy-, 1500.
 2-Methoxydiphenyl, 4'-amino-, and its acetyl derivative, and 4'-bromo-, -iodo-, and -nitro-, 1383.
 5-Methoxy-2-formyl- β -phenoxypropionic acid, and its derivatives, 793.
 10-Methoxy-1-methyl-4-carboline, 3-mono- and tri-chloro-, 318.
 2'-Methoxy-6-methylflavone, 1106.
 5-Methoxy-1-methylindole-2-carboxydiethylacetalamide, 318.
 5-Methoxy-1-methylindole-2-carboxylic acid, 317.
 2-Methoxy-4'-methyltriphenylcarbinol, 877.
 7-Methoxy-1-naphthacyl bromide, 1311.
 Methoxynaphthoxy-1-acetonaphthones, 1500.
 6-Methoxy-2-naphthylamine, 1-nitro-, 387.
 7-Methoxy-2-naphthylamine, and its diacetyl derivative, 383.
 7-Methoxy-2-naphthylamine, 1-nitro-, diacetyl derivative, 386.
 Methoxy-2-naphthyl-5:6-benzochromones, 1500.
 2-(2'-Methoxy-1'-naphthyl)chromone, 819.
 2-(2'-Methoxy-1'-naphthyl)-3-chromonol, and its acetyl derivative, 818.
 2-(2'-Methoxy-1'-naphthyl)-3:4-1":2"-coumarano-4"-cyclohexen-6-one-1-carboxylic acid, ethyl ester, and its oxime, 819.
 1-(2'-Methoxy-1'-naphthylidene)coumaran-2-one, and its derivatives, 819.
 7-Methoxy-N-nitrosoaceto-2-naphthalide, 1-nitro-, 387.
 6-Methoxy-1- Δ^8 -pentenyl-1-tetralol, 732.
 4-(4'-Methoxyphenoxy)benzaldehyde, 1102.
 4-(4'-Methoxyphenoxy)benzoic acid, derivatives of, 1101.
p-Methoxyphenyl α -anilinobenzyl ketone, 349.
 γ -*p*-Methoxyphenyl- Δ^3 -crotonolactone, 442.
p-Methoxyphenyl α -methylanilinobenzyl ketone, 349.
 2-*p*-Methoxyphenyl-1-methyl-5-pyrrolidone, 2-hydroxy-, 442.
 6-Methoxy-2-phenylnaphthalene, 383.
 6-Methoxy-2-phenylnaphthalene, 5-nitro-, 387.
 7-Methoxy-2-phenylnaphthalene, 383.
 7-Methoxy-2-phenylnaphthalene, 8-nitro-, 386.
 Methoxyphenylpyridines, and their picrates, and nitro-derivatives, 359.
 2-*p*-Methoxyphenyl-5-pyrrolidone, 2-hydroxy-, 442.
p-Methoxyphenyl α -*p*-toluidinobenzyl ketone, 349.
 6-Methoxytetralin, preparation of, 730.
 6-Methoxy-1-tetralone, preparation of, 730.
 5-Methoxyvalerenophenone, 2-hydroxy-, acetyl derivative, and its derivatives, 1121.
 Methyl bromide, hydrolysis of, in aqueous formic acid, 945.
 in aqueous solution, 925.
 β -Methylaminooethanol, 289.
 5'-Methyl-7-*n*-amyl-3:4-benzocoumarin, 5-hydroxy-, and its acetyl derivative, 1395.
 6-hydroxy-, and its acetyl derivative, 1121.
 5'-Methyl-7-*n*-amyl-3:4-cyclohexenocoumarin, 5-hydroxy-, and its acetyl derivative, 1123.
 Methyl *n*-amyl ketone, labile and stable semicarbazones of, 99.
 2-Methyl 3:6-anhydroaltrose, 322.
 2-Methyl 3:6-anhydro- α -methylaltrose, 322.
 Methyl-1:2-benzanthracenes, photo-oxides, 1126.

- 6-Methyl-1:2-benzanthracene**, 10-bromo-, and 10-cyano, 412.
9-Methyl-1:2-benzanthracene, 10-bromo-, and 10-cyano, 412.
10-Methyl-1:2-benzanthracene, 10-cyano, 411.
9-Methyl-1:2-benz-10-anthraldehyde, 412.
1-Methyl-5:6-benz-4-carboline, 3-chloro, 316.
8-Methyl-3:4-benzofluorene, and its derivatives, 638.
8-Methyl-3:4-benzofluorenone, 638.
5'-Methyl-3:4-benzocoumarin, 6-hydroxy-, and its acetyl derivative, 1120.
Methyl- β -benzoyloxyethylidethyliammonium chloride and iodide, 421.
1-Methyl-3:4-benzphenanthrene, 297.
 β -Methylbutane- $\alpha,\delta\delta$ -tetracarboxylic acid, 1345.
2-Methyl-1- Δ^1 -butenyl-3:4-dihydrophenanthrene, 733.
Methylisobutylcarbinyl p-xenylurethane, 1549.
2-Methyl-1-n-butylphenanthrene, and its derivatives, 734.
2-Methyl-4-butylresorcinol, 246.
3-Methylbutyrophene, 2:4-dihydroxy-, 246.
1-Methyl-4-carboline, 3-chloro-, methosulphate, 316.
 α -O-Methylisochondrodendrinemethine hydrochloride, 746.
O-Methylisococlaurine methiodide, 745.
cis-9-Methyl-3-decalol, 725.
O-Methylidihydropterocarpin, oxidation of, 792.
O-Methylidihydropterocarpin, oxidation of, 793.
5-Methyl diphenyl, 2-cyano-, 1120.
Methylene-blue, adsorption of, at mercury-water interfaces, 596.
Methylene groups, active, addition of $\beta\gamma$ -unsaturated alcohols to, 1266.
addition of $\alpha\beta$ -unsaturated alcohols to, 704.
gem-Methylethyl groups, action of selenium on, 1277.
2-Methyl-2-ethyl-1:2:3:4-tetrahydrophenanthrene, and its picrate, 1279.
6-Methylflavone, 2'-hydroxy-, and its acetyl derivative, 1106.
 β -Methylgalactopyranoside 6-bromohydrin, 630.
 α -Methylgalactoside barium sulphate, 1478.
2-Methyl-4:5-glucopyrano- Δ^2 -oxazoline, 434.
 α -Methylglucoside barium sulphate, 1478.
Methyl- β -glycyloxyethylidethyliammonium dirufanate, 423.
Methylheptadecylmalonic acid, and its ethyl ester, 70.
1-Methyl-4 Δ^1 cyclohexadiene, preparation and spectrum of, 1463.
18-Methylhexahydrochrysene, and its derivatives, 734.
6-Methyl-4 Δ^1 cyclohexenealdehyde, and its derivatives, 639.
6-Methyl-4 Δ^1 cyclohexenecarboxylic acid, and its derivatives, 639.
5'-Methyl-3:4-cyclohexenocoumarin, 6-hydroxy-, and 7-hydroxy-acetyl derivative, 1123.
7-Methyl-3:4-cyclohexenocoumarin, 5-hydroxy-, acetyl derivative, 1124.
cis-8-Methylhydrindan-1:2-diol, 726.
cis-8-Methyl-2-hydridanol, 726.
N-Methyl-N- β -hydroxyethyl-N'- α -naphthylthiourea, 289.
13-Methyl-13-hydroxytetradecicoic acid, 69.
1-Methylindolyl-3-glyoxylic acid, methyl ester, 460.
Methyl- β -lauryloxyethylidethyliammonium iodide, 422.
Methylmalonic acid, α -bromo-, hydrolysis of ions of, 956.
Methyl-6-methoxy-4-quinolylcarbinol hydrochloride, 1313.
2-Methylnonadecane, 1- and 2-bromo-, 70.
2-Methylnonadecan-1-ol, 71.
2-Methylnonadecic acid, 71.
cis-9-Methyl-4 Δ^1 -3-octalol, 725.
cis-9-Methyl-4 Δ^1 -3-octalone semicarbazone, 725.
2-Methyl-1:3-cyclopentanedione, 1446.
- 4-(2-Methyl-N-pentyl)aminoazobenzene-4'-arsonic acid**, 577.
2-Methyl-N-pentylaniline, 576.
2-Methyl-4- β -phenylethylresorcinol, and its di-p-nitrobenzoyl derivative, 247.
Methylphloracetophenone, spectrum of, absorption, 1053.
Methylphloroisobutyrophenone, and its dimethyl ether, 426.
1-Methylpropenylcyclohexanedicarboxylic acids, 1344.
3-Methylpropiophenone, 2:4-dihydroxy-, 246.
1-Methyl-2-propylcyclohexane-3:4-dicarboxylic acid, and its anhydride, 1344.
4-Methyl-2-n-propylisophthalic acid, 1346.
2-Methyl-4-propylresorcinol, 246.
2- and 4-Methyl-5:6:3':2'-pyridoquinolines, 2-chloro-, and 2-hydroxy-, 1166.
N¹-Methylsulphanilamidoacetic acid, ethyl and methyl esters, 1576.
2-Methyl-1:2:3:4-tetrahydronaphthalene-3-carboxylic acid, 2-hydroxy, lactones, 1325.
N⁴-4-Methyl-2'-thiazolylsulphanilamide, 1307.
2-Methylthiophen-5-acetic acid, 3-hydroxy-, ethyl ester, 1387.
dL-Methyl δ -p-tolylamyl ketone semicarbazone, 453.
Methyl- β -o-tolylethylmalonic acid, and its *p*-nitrobenzyl ester, 1241.
2-Methyl-4:5(3':4':6'-tri-O-acetylglucopyrano)- Δ^2 -oxazoline, 436.
 β -Methyl 3:4:6-trimethyl N-acetylglucosaminide, 434.
2-Methyl-4:5(3':4':6'-trimethylglucopyrano)- Δ^2 -oxazoline, 436.
2-Methyl-2-(4:8:12'-trimethyltridecyl)chroman, 6-hydroxy, 330.
Methyltriphenylmethyls, 1242.
Michler's hydrol, reaction of, with sodium nitrite in hydrochloric acid, 93.
Miro tree. See *Podocarpus ferrugineus*.
n- and iso-Miropinic acids, and their derivatives, 683.
Mobility, measurement of, by conductivity titration, 84.
Monolayers. See *Films*, *unimolecular*.
Mucilages, seed, 1501.
Myrcene, spectrum of, absorption, 1461.

N.

- 2-Naphthaldehyde**, 1-bromo-, 297.
Naphthalene series, chromones of, 1499.
Naphthalene-6-sulphonic acid, 2-amino-, amide, and its acetyl derivative, 692.
1-Naphthalene-7-sulphonic acid, 1-cyano-, 1310.
 α - and β -Naphthoic acids, potassium salts of, 861.
Naphthols, preparation of, from hydronaphthalene alcohols and ketones, 1134.
 α -Naphthoyldiazomethane, 1310.
 β -2-Naphthoyl- $\alpha\beta$ -dimethylpropionic acid, and its methyl ester, 301.
 β -1-Naphthoyl- α -methyl- α -ethylpropionic acid, 1278.
Naphthoyloxy-1-acetonaphthones, 1500.
1-Naphthoylpalmitylmethane, 2-hydroxy-, 1500.
 α -Naphthylacetone 2:4-dinitrophenylhydrazone, 821.
 α - and β -Naphthylamine hydrochlorides, action of *n*-dodecyl alcohol on, 388.
Naphthyl-5:6-benzochromones, 1500.
2-2'-Naphthyl-5:6-benzochromones, hydroxy-, and their acetyl derivatives, 1500.
 β -Naphthyl $\alpha\beta$ -dibromo- β -phenylethyl ketone, 250.
 β -Naphthyl α -bromostyryl ketone, 250.
2-Naphthylmalonic acid, 1-bromo-, ethyl ester, 298.
 β -Naphthylmethylcarbinol, resolution of, and its derivatives, 676.
 γ -1-Naphthyl- α -methyl- α -ethylbutyric acid, 1278.

- α - and β -Naphthylmethylmagnesium halides, action of acetyl chloride on, 819.
 α -2-Naphthyl- β -phenylpropionic acid, α -2-1-bromo-, 298.
 β -Naphthyl styryl ketone, 250.
 γ -Naphthyl- $\alpha\beta\gamma$ -trimethylbutyric acid, 301.
 γ -2-Naphthyl- $\alpha\beta\gamma$ -trimethylbutyrolactone, 300.
Neodymium chloride, solubility of, 670.
Nitro-compounds, structure of, 283.
polyNitro-compounds, complex formation of, with aromatic bases and hydrocarbons, 1539.
Nitrogen monoxide (*nitrous oxide*), sensitisation of hydrogen-oxygen reaction by, 464.
dioxide (*nitric oxide*), reaction of, with chlorine, inhibition of, 823.
Nitrous acid, action of, on formaldehyde, 142.
on *p*-nitrodimethylaniline in hydrochloric acid, 138.
Nitrogen organic compounds, heterocyclic, spectra of, absorption ultra-violet, 844.
Nitrosylsulphuric acid, action of, on *m*-fluorophenol, 205.
reduction of, by sulphur monoxide, 1157.
Nomenclature, inorganic chemical, report of Committee on, 1404.
Norlupanonol, 457.
 $\Delta^{38(9)}$ -Normenthadiene, spectrum of, absorption, 1463.
- O.
- Obituary notices:—
Henry Edward Armstrong, 1418.
Douglas Heriot Baird, 562.
William Heath Bayliss, 1031.
Alfred Berthoud, 1439.
William Thomas Burgess, 100.
William Alexander Skeen Calder, 563.
Wallace Hume Carothers, 100.
Prince Ginori Conti, 563.
Reginald Craven, 102.
William Risden Ciper, 103.
Harry Medforth Dawson, 564.
Oliver Gatty, 1440.
Thomas Hartley, 1031.
John Haycock, 568.
George William Thomas Horrod, 569.
Morris Charles Lamb, 569.
Harold Theodore G. van der Linde, 570.
Percival George Lloyd, 104.
James Scott MacLaurin, 571.
Percy George Mander, 1441.
William Frederick Mawer, 572.
Arthur Pinkerton, 1031.
Benjamin Dawson Porritt, 572.
George James Robertson, 104.
Luther Robert Scammell, 1032.
George Baty Scott, 1032.
Frank Thomas Shutt, 1442.
Angus Smith, 1033.
John Trotter, 105.
John Isaac Watts, 1033.
Richard Vernon Wheeler, 573.
Thomas Williams, 1034.
4-*n*-Octadecylaminoazobenzene-4'-arsonic acid, 577.
Octadecylaniline, 576.
ar-Octahydrodinaphthyline, 201.
ar-Octahydronaphthidine, and its diacetyl derivative, 202.
trans- Δ^2 -1-Octanol, and its acetate, 726.
2:3:4:5:2':3':4':5'-Octamethylidiphenylmethane, 1397.
Octamethyl 3-galactosidogalactose, 81.
 β -Octanol, dielectric constant of, 894.
 β -Octyl chlorosulphonate, 228.
- E**strogens, synthetic, related to triphenylethylene, 1327.
Oils, essential, Indian, constituents of, 451.
Oleanenes, 1473.
 $\Delta^{12:13}$ -Oleanene, 16-hydroxy-, 1473.
Olefins, elimination of, from alkyl and aralkyl bromides, 899.
Oleic acid, magnesium salt, relative phase volumes and type of emulsions stabilised by, 211.
Optical activation of acids, 264.
inversion, Walden's, in altro series, 319.
superposition, studies in, 862.
Optically active compounds, rotation of, influence of solvents on, 290.
Organic compounds, isotopic exchange reactions of, 1362.
Ovomucoid, carbohydrate constituents of, 184.
Oxalic acid, thermodynamic dissociation constants of, 858.
sodium salt, hydrolysis of, 580.
3-Oxalylbenzene-1:2:4-tricarboxylic acid, methyl ester, 1345.
isoOxazoles, preparation of, from chalkone derivatives, 247.
Oxidation, electrolytic. See under Electrolytic.
Oxine. See Quinoline, 8-hydroxy-.
Oxy-acids, inorganic, heavy oxygen exchange between water and, 131.
Oxigen, heavy, exchange of, between inorganic oxy-anions and water, 131.
ignition of, mixed with ether, 143, 151.
reactions of, with hydrogen, sensitised by nitrous oxide, 464.
Oxymercurichlorochloromercurypyrromeconic acid, 669.
- P.
- 2-Palmitoyloxy-1-acetonaphthone, 1500.
Papaverine, synthesis of, 1209.
Parachor as criterion for *cis-trans*-isomerism, 280.
Pectic acid, constitution of, 1106, 1114, 1506.
2-Pentadecyl-5:6-benzochromone, 1500.
 Δ^{ab} -Pentadiene, dimeride of, 1176.
cycloPentadiene, kinetics of association of, 735.
 Δ^a -Pentenoic acid, deuterium exchange reaction and isomerisation of, 1362.
Perbenzoic acid, oxidation with, of acetyloleanolic acid and its methyl ester, 1387.
Periodates. See under Iodine.
Peroxidase, action of, 769.
Phellandral, constitution of, 808.
Phellandrenes, spectra of, absorption, 1462.
 d -, d - and l -Phellandric acids, and their derivatives, 809.
Phenol, *m*-fluoro-, action of nitrosylsulphuric acid on, 205.
2-fluoro-6-nitro-, and 2-fluoro-4-nitroso-, 811.
3-fluoro-4-nitroso-, 206.
3-fluoro-4- and -6-nitroso-, synthesis of, 1268.
Phenols, condensation of, with ketones, 1103.
nitrosation of, 810, 1268.
p-Phenoxytriphenylmethane, 1334.
p-Phenoxyphenylmethyl, 1334.
Phenyl carbonate, action of sodium on, 215.
chlorosulphite, reaction of, with tertiary bases, 223.
isocyanodichloride, and bromo-, and nitro-, 193.
methyl sulphite, 225.
3-Phenylacetamido-1-thionaphthen, 326.
2-Phenylaceto-1-naphthalide, and 4-chloro-, and 4-nitro-, 379.
6-Phenylaceto-1- and -2-naphthalides, 381.
7-Phenylaceto-1-naphthalide, 382.
1-Phenylacetylbenzisothiazolone, 325.

- 6-Phenylacetlcoumarin-3-carboxylic acid, 5-hydroxy-, and its ethyl ester, 247.**
- Phenylalanylcholine chloride hydrochloride and iodide hydroiodide, 425.**
- Phenyl- α -anilino- p -methoxybenzyl ketone, 348.**
- Phenylazo-bis-acetoxime, metallic derivatives of, 654.**
- Phenylazo-bis-benzaldoxime, metallic derivatives, 655.**
- Phenylazo-bis-methylethylketoxime, metallic derivatives of, 654.**
- α -Phenylbenzimino-2-carbomethoxy-6-tolyl ether, 272.**
- Phenylbenzimino-2'-carbomethoxy-6'-tolyl ether, α -chloro-, 273.**
- N-Phenylbenzimino-4:6-dichloro-2-carbomethoxy-phenyl ether, 273.**
- β - p -Phenylbenzoylpropionic acid, 1030.**
- Phenyl α -bromo- β -ethoxy- β -2-methoxy-1-naphthylethyl ketone, α -hydroxy-, 819.**
- Phenyl $\alpha\beta$ -dibromo- β -2-methoxy-1-naphthylethyl ketone, α -hydroxy, 818.**
- Phenyl(6'-bromo-3':4'-methylenedioxyphenyl)isoazoles, 251.**
- α -Phenyl- β -2-(1-bromonaphthyl)acrylic acid, 297.**
- α -Phenyl- β -2-(1-bromonaphthyl)ethane, 298.**
- Phenyl $\alpha\beta$ -dibromo- β -phenylethyl ketone, α -hydroxy-, 250.**
- γ -Phenyl- $\Delta\beta$ -crotonolactone, γ - p -bromo-, 441.**
- Phenyldi- p -bromophenylguanidine, 194.**
- 1-Phenyl-4:3'-dimethylaminobenzylidene-5-pyrazolone, 59.**
- r - β -Phenyl- $\gamma\gamma$ -dimethylpropane, r - $\alpha\gamma$ -dihydroxy-, 843.**
- Phenylditolylguanidines, and bromo- and nitro-, 194.**
- α -Phenylethyl bromide, olefin elimination from, 899. bromide and chloride, hydrolysis of, in acetone containing mercuric bromide or chloride, 679. chlorosulphinite, 228.**
- β -Phenylethyl bromide, olefin elimination from, 899.**
- 2-Phenyl-1-ethyl-5-pyrrolidone, 2-hydroxy-, 440.**
- Phenyl heptadecyl ketones, hydroxy-, and their derivatives, 837.**
- 2-Phenylcyclohexanone, derivatives of, 848.**
- Phenyl 6-hydroxy-2:3-benzostyryl ketone, α -hydroxy-, 818.**
- β -Phenyl- α -2-(1-hydroxynaphthyl)propionic acid, 298.**
- Phenyl-2-hydroxy-1-naphthylsulphone, 2'-nitro-, 445.**
- 5-Phenyl-3- α -hydroxyphenylisoazazole, 251.**
- 3-Phenylindole-2-carboxylic acid, 6-chloro-3- α -nitro-, 317.**
- Phenyl 8-methoxy-2:3-benzostyryl ketone, α -hydroxy-, and its derivatives, and their reactions, 817.**
- Phenyl p -methoxybenzyl ketone, preparation of, 348.**
- 4-Phenyl-6-(2'-methoxy-1-naphthyl)- Δ^3 cyclohexen-2-one-1-carboxylic acid, 4- α -hydroxy-, ethyl ester, and its derivatives, 818.**
- Phenyl α -methylanilino- p -methoxybenzyl ketone, 349.**
- 3-Phenyl-5-(3':4'-methylenedioxyphenyl)isoazazole, 251.**
- α -Phenyl- δ -methylpentane- $\alpha\delta\epsilon$ -tricarboxylic acid, ethyl ester, 850.**
- ϵ -Phenyl- β -methyl- Δ^4 -pentene- $\alpha\epsilon$ -dicarboxylic acid, α -cyano-, ethyl ester, 850.**
- 1-Phenyl-2-methyl-5-pyrrolidone, 2-hydroxy-, and 2-hydroxy-1- p -bromo-, 440.**
- 2-Phenyl-1-methyl-5-pyrrolidone, 2-hydroxy-, 440. 2-hydroxy-2- p -bromo-, 442.**
- 2-Phenylnaphthalene, 374.** preparation of, from diphenyl, 1030.
- 2-Phenylnaphthalene, amino-, bromo-, chloro-, hydroxy-, and nitro-derivatives, and their derivatives, 374, 378.**
- 2-Phenylnaphthalenes, synthesis of, 374.**
- 4-Phenylnaphthalene, 1-nitro-, 211.**
- 2-Phenyl-1:4-naphthaquinone, 2'- and 4'-nitro-, 380.**
- 2-Phenyl-1-naphthylamine, and 4-chloro-, and 4-nitro-, 379.**
- 6-Phenyl-1- and -2-naphthylamines, 381.**
- 7-Phenyl-1-naphthylamine, 382.**
- Phenyl- β -naphthylisoazoles, 251.**
- β -Phenylpropionic acid, β - α -cyano-, and its methyl ester, 1076.**
- r - α -Phenylpropylamine, resolution of, and its salts, 336.**
- 2-Phenyl-1- n -propyl-5-pyrrolidone, 2-hydroxy-, 441.**
- δ -(α -Phenylpropyl)semicarbazide hydrochlorides, 337.**
- Phenylpyridines, and nitro-, and their derivatives, 349.**
- α -Phenylpyridine, α -3- and -4-amino-, and α -4-nitroso-amino-, and their acetyl derivatives, 1281.**
- α -4-bromo-, -chloro-, -cyano-, and iodo-, and their picrates, 355.**
- β -Phenylpyridine, β -3- and -4-amino-, and their acetyl derivatives, 1281.**
- γ -Phenylpyridine, γ -3-amino-, and its acetyl derivative, 1282.**
- γ -4-bromo-, and -chloro-, 356.**
- α -Phenylpyridine-4-carboxylic acid, methyl ester, 357.**
- 2-Phenyl-5-pyrrolidone, 2-hydroxy-2- p -bromo-, 442.**
- 1-Phenyl-1:2:3:4-tetrahydronaphthalene-2:3-dicarboxylic acid, and its derivatives, 1321.**
- Phenyl α - p -toluidino- p -methoxybenzyl ketone, 349.**
- α -Phenyl- β -(3:4:5-trimethoxyphenyl)acrylic acid, and its p -phenylphenacyl ester, 199.**
- α -Phenyl- β -(3:4:5-trimethoxyphenyl)ethylene, α -cyano-, 199.**
- α -Phenyl- β -(3:4:5-trimethoxyphenyl)propionic acid, p -phenylphenacyl ester, 199.**
- Phenyl undecyl ketones, hydroxy-, and their derivatives, 836.**
- Phenylvinylcarbinol, action of, with ethyl acetooacetate, 1266.**
- Phosphorus, reaction of, with iodine in carbon tetrachloride, 583.**
- Phosphorus chlorides, reaction of, with n -butyl alcohol, 1464.**
- Phosphoryl chloride, reaction of, with n -butyl alcohol, 1464.**
- N - γ -Phthalimidopropylformanilide, 691.**
- Phthalimidyl-3-acetoacetic acid, ethyl ester, 1073.**
- Phthalocyanines, 1070, 1076, 1079.** X-ray structure of, 36.
- 6:7-Phthalylindazole, 367.**
- Physical properties and constitution, 171, 1528.**
- β and γ -Picolines, separation of, in mixtures with 2:6-lutidine, 241.**
- Picryl iodide, crystal structure of, 1398.**
- d -Pinane, 347.**
- 2-Piperazine-4-methyl-5:6:3':2'-pyridoquinoline, 1166.**
- Piperidinobenzonitriles, chloro- and nitro-, 1524.**
- 2-Piperidino-4:6-di-(p -tolylthio)nitrobenzene, 1528.**
- 4-Piperidino-2:6-di- p -tolylthionitrobenzene, 1527.**
- Piperidinomethyl-7-methoxy-1-naphthylcarbinol hydrochloride, 1311.**
- Piperidinomethyl-6-methoxy-4-quinolylcarbinol, and its hydrochloride, 1313.**
- Piperidinomethyl-1-naphthylcarbinol, and its hydrochloride, 1310.**
- Piperidinomethyl-5:6:3':2'-pyridoquinolines, and their salts, 1166.**
- 2-Piperidino-4-methylquinoline, 6-nitro-, 1166.**
- Piperidinomethyl-4-quinaldylcarbinol, preparation of, 1312.**
- 6-Piperidinonitrobenzene, 2:4- d -bromo-, and 2-chloro-, 1526.**
- 4':4''-Piperidylpiperidinomethyl-6-methoxy-4-quinolylcarbinol, and its trihydrochloride, 1315.**
- 4':4''-Piperidylpiperidinomethyl-4-quinolylcarbinol, and its salts, 1313.**
- 1-Piperidino-2:4:6-tri- p -toluenesulphonylbenzene, 1527.**
- Piperylene, spectrum of, absorption, 1461.**

Pituitary, posterior lobe, chemistry of oxytocic hormone of, 419.
 Plants, Argentine, 1051.
 leguminous fish-poison, active principles of, 309, 1178.
Plantago lanceolata, seeds, mucilaginous polysaccharide of, 1501.
 Platinum, catalytic. See under Catalysts.
 Platinum phthalocyanine, X-ray structure of, 36.
Podocarpus ferrugineus, resin from, 683.
 Poisons, fish, from leguminous plants, 309, 1178.
 Polycyclic compounds, growth-inhibitory, synthesis of, 409.
 Polymerisation, 1169, 1176, 1339.
 Polymorphism, 588.
 Polypropenic acids, and their esters, 634.
Polyporus betulinus, triterpene acids of, 632.
 Polysaccharides, 237.
 Porphins, X-ray structure of, 601.
 Potassium, action of, on arylmethyl alcohols in xylene, 881.
 Potassium chloride, hydrolysis of, 581.
 chromate, hydrolysis of, 581.
 dichromate, hydrolysis of, 581.
 sulphamate, crystal structure of, 1.
Praseodymium chloride, solubility of, 670.
 Propaldehyde, *a*-bromo-, diethylacetal of, reaction of, with ethylthiol, 1553.
2-isoPropenyl-3:4-benzphenanthrene, picrate, 298.
4-isoPropenyl-*m*-cresol, dimeride, 1105.
0-isoPropenylphenols, dimeric, structure of, 1103.
3-Propionamido-1-thionaphthen, and 2-bromo-, and 2-nitro-, 326.
 Propionyl-3:4-benzphenanthrenes, and their semicarbazones, 1161.
1-Propionylbenzisothiazolone, 325.
6-Propionylcoumarin-3-carboxylic acid, 5-hydroxy-, 246.
N-Propionylglucosamine, *N*-*a*-hydroxy-, 433.
2-Propionynaphthalene, 2-*a*-bromo-, 301.
 isoPropyl bromide, hydrolysis of, in aqueous formic acid, 945.
 in aqueous solution, 925.
 olefin elimination from, 899.
4-*n*-Propylaminoazobenzene-4'-arsonic acid, 577.
***a*-*n*-Propylaminopropionic acid**, and its benzenesulphonyl derivative, 1293.
10-isoPropyl-1:2-benzanthracene photo-oxide, 1126.
 Propyl-3:4-benzphenanthrenes, and their derivatives, 1161.
2-isoPropyl-3:4-benzphenanthrene, and its picrate, 298.
 isoPropylidene groups, stability of, 68.
 isoPropylpyridinium ferrocyanide, 229.
 Protons, heat of hydration of, 1403.
 Pterocarpin, 787.
 Pyridine, reaction of, with nitrosoacylarylaminates, 372.
 with tetrahalogenated *p*-benzoquinones, 1378.
5:6:3':2'-Pyridoquinoline, derivatives of, 1164.
5:6:3':2'-Pyridoquinoline, 4-chloro-, and 4-hydroxy-, 1168.
 3- and 4-Pyridylphenyls, and their derivatives, 1279.
4-*α*-Pyridylphenyl, 2'- and 4'-amino-, and 2'- and 4'-nitro-, and their derivatives, 1283.
4-*β*- and -*γ*-Pyridylphenyls, 2'- and 4'-nitro-, 1284.
 Pyrites, determination in, of sulphur, 401.
γ-Pyrone, derivatives, mercuration of, 663.

Q.

Quaterphenyl, 1379.
Quaterphenyl, 4:4"-diamino-, 4:4"--dichlorohydroxy-, dihydroxy-, and 4:4"--dinitro-, and their derivatives, 1382.

Quillaic acid, structure of, and its derivatives, 612, 1469.
Quillaic acid, methyl ester, conversion of, into a hydrocarbon, 1335.
Quillaoil, 1472.
 Quinitol acetates, 13.
 Quinol, oxidation of, with sodium chlorate, 1092.
Quinoline, 6-amino-4-hydroxy-, and its salts, 1168.
 8-hydroxy-, as reagent for magnesium, 656.
Quinoline-2-carboxylic acid, 6-amino-4-hydroxy-, and its 6-acetyl derivative, ethyl ester, 4-hydroxy-, and 6-nitro-4-hydroxy-, ethyl esters, 1167.
Quinoline-sulphur trioxide, 230.
Quinolinium sulphite, 226.
4-Quinolyl chloromethyl ketone, 1311.
4-Quinolyl diazomethyl ketone, 1311.

R.

Radicals, free, 213, 874, 880, 883, 1242, 1249.
Radix pareira brava, botanical source of, 737.
 Reactions, aromatic side-chain, polar effects of substituents in, 692.
 elimination, 899.
 Refractive index of cyano-esters, 1528.
 Report of the Council, 481.
 Resins, elemi Manila, constituents of, 795.
 miro, 683.
 natural phenolic, constituents of, 1098, 1321.
 Resinols, triterpene, 1196, 1198, 1387.
 Resonance, in relation to activation energies and dissociation constants, 1447.
 Resorcinol nucleus, γ -substitution in, 245.
 Rhodizonic acid, barium salt, as indicator, 401.
 Rocks, carbonate and silicate, determination in, of magnesium, 656.
 Rotation of optically active compounds, influence of solvents on, 290.
 Rottlerin and its derivatives, spectra of, absorption, 1052.

S.

Salicylidene-*o*-aminophenol, vanadium derivatives, 1068.
 Salts, dissociation of, in water, 87.
 hydrolysis of, in solution, 578.
 Salt deuterates, 72.
 Salt hydrates, 72.
 Sapogenins, 612, 617, 713, 1469.
Saponaria officinalis, saponin of, 617.
 Saporubin, 618.
 Sarcostin, and its derivatives, 1443.
 Seeds, mucilage from, 1501.
 Selenium, action of, on *gem*-methylethyl groups, 1277.
 Selenium organic compounds, 831.
 α -Selenobenzoic acid, 832.
 Semicarbazides, optically active, preparation of, 336.
 Silica gel, adsorption by, 158.
 Sitosterol, and its acetate and bromoacetate, 1546.
 Sodium hydrogen carbonate, hydrolysis of, 581.
 polyiodides, 837.
 nitrite, reaction of, with Michler's hydrol in hydrochloric acid, 93.
 Sodium organic compounds :—
 Sodium ethoxide, racemisation of carboxylic esters by, 216.
 Sørensen Memorial Lecture, 554.
 Solids, adsorption by, of gases, 156.
 monolayers on, 511, 773.
 Solutions, structure of, relation of, to thermal expansion coefficient, 870.

- Solvents**, effect of, in dipole-moment measurements, 752.
on temperature coefficients in complex formation, 1539.
non-aqueous, acid catalysis in, 1202.
ionisation in, 1329, 1360.
- Solway ultra-blue B**, adsorption of, at mercury-water interfaces, 596.
- Sorbic acid**, methyl ester, polymerisation of, by heat, 1339.
- Spectra**, absorption, of hydroxy-aldehydes, hydroxy-ketones, and their methyl ethers, 1347.
of organic compounds in solution, 1453.
of rottlerin, and its derivatives, 1052.
ultra-violet, of heterocyclic nitrogenous compounds, 844.
- Starch**, banana, constitution of, 390.
methylated, acetolysis of, 276.
- Steam-carbon complex**, 177.
- Stearic acid**, phenyl ester, Fries rearrangement of, 835.
- Steroids**, 60.
- Sterols**, structure of, 509.
- Sterol group**, 659, 1390, 1482.
- Sterol-cestrone group**, 848.
- Stigmasterol**, and its acetate, and *tetrabromo*-, acetate, 1546.
- Styrene**, polymerisation of, catalytically, 775.
thermal, 48.
- Styrene**, bromo- and chloro- ω -nitro-derivatives, 449.
- Substitution** at saturated carbon atoms, 913, 920, 923, 935, 940, 945, 949, 956, 960, 966, 971, 974, 979, 1011, 1017.
- Succindianilide**, 3:3'-dichloro- and -dinitro-, 366.
- Succinic acid**, thermodynamic dissociation constants of, 858.
- Succino-*m*-chlorophenylimide**, 366.
- Sucrose**, action of bacteria on, 237.
- Sugars**, methylated, syntheses of, by means of benzyl radical, 453, 1147.
- Sulphamic acid**, crystal structure of, 10.
- Sulphanilamide**, derivatives of, 1574.
piperazine and pyridine derivatives of, 202.
- Sulphanilamidoacetic acid**, ethyl and methyl esters, 1575.
- Sulphates**. See under Sulphur.
- 2-Sulphinodiphenyl ether**, 2'-nitro-4-hydroxy-, 446.
- 3'-Sulphonobenzeneazo- β -naphthol**, copper salts, 611.
- 5'-Sulphonobenzeneazo- β -naphthol**, 2'-hydroxy-, aluminium and ammonium salts, 607.
copper derivatives, 611.
vanadium derivative, 1069.
- 5'-Sulphonobenzeneazo- β -naphthol-6-sulphonic acid**, 2'-hydroxy-, cupric salt, 611.
vanadium salts, 1069.
- 5'-Sulphonobenzeneazoresorcinol**, 2-hydroxy-, vanadium derivatives, 1069.
- 4-Sulphonamidophenylthiourea**, 1307.
- 4'-Sulphonaphthalene-1':4-azo-1-phenyl-3-methylpyrazol-5-one**, 2'-hydroxy-, aluminium and ammonium salts, 607.
- Sulphonoxypropionic acid**, α -chloro-, ethyl ester, 229.
- Sulphur**, monoclinic, transformation of, into rhombic form, 588.
- Sulphur monoxide**, reduction of nitrosylsulphuric acid by, 1157.
- Sulphates**, determination of, volumetrically, with barium rhodizonate, 401.
- Sulphur organic compounds**, 831.
Sulphurous acid, esters, 218.
- Sulphur determination** :—
determination of, in pyrites, 401.
- Sulphurous acid**. See under Sulphur.
- Sulphuryl chloride**, reaction of, with dibenzyl disulphide, 641.
- Surface pressure**, measurement of, in films, 114.
- T.**
- ψ -**Taxasterol**, and its derivatives, 798.
- Tartaric acid**, isobutyl ester, rotation of, in various solvents, 291.
- Tautomerism**, three-carbon, influence of poles and polar linkings on, 1560.
- Tellurium organic compounds**, 831.
- Tephrosia toxicaria**, constituents of, 1178.
- Terpenes**, catalytic dehydrogenation of, and of terpene ketones, 1139.
- Terpenoid compounds**, diene syntheses with, 1162.
- α -**Terpinene**, condensation of, with maleic anhydride, 702.
spectrum of, absorption, 1463.
- Tetra-acetyl aldehydophenylglucosides**, and their derivatives, 1402.
- Tetra-acetyl 1-cryptylglucosides**, 244.
- Tetra-acetyl dihydrocryptylglucosides**, 244.
- Tetra-acetyl menthylglucosides**, 243.
- Tetra-acetyl 4-methylcyclohexylcarbinylglucosides**, 244.
- Tetra-acetyl 1-3-methylcyclohexylglucosides**, 244.
- Tetra-acetyl mucic acid**, *i*-menthyl and octyl esters, 865.
- Tetra-acetyl 4-isopropylcyclohexylcarbinylglucosides**, 244.
- Tetra-acetyl-*dl*-talomucic acid**, ethyl ester, 865.
- Tetra-arylarsonium salts**, 1192.
- Tetra-arylphosphonium salts**, 1192.
- Tetra-arylstibonium salts**, 1192.
- Tetrabenzazaporphin**, and its metallic derivatives, 1079.
X-ray structure of, 602.
- Tetrabenzporphin**, and its metallic derivatives, 1079.
X-ray structure of, 602.
- Tetraenzoporphins**, intermediates for, 1070, 1076.
- 4-*n*-Tetradecylaminoazobenzene-4'-arsonic acid**, 577.
- Tetradecylaniline**, 576.
- Tetrahydridobenzopyran**, derivatives, synthesis of, 1121.
- Tetrahydromalaccol**, and its triacetyl derivative, 313.
- α - and β -**Tetrahydromiropic acids**, 685.
- 1:2:3:4-Tetrahydronaphthalene-2:3-dicarboxylic acid, and its derivatives, 1321.
- 3:4:5:4'-Tetramethoxystilbene, 200.
- 1:2:3:4-Tetramethylanthracene, and its derivatives, 302.
- 1:2:3:4-Tetramethylanthraquinone, 303.
- 5:6:9:10-Tetramethyl-1:2-benzanthracene, and its picrate, 18.
photo-oxide, 1126.
- 2:4:4:7-Tetramethylchroman-2-carboxylic acid, 1105.
- 1:2:9:10-Tetramethyl-9:10-dihydroanthracene, 9:10-dihydroxy-, 18.
- 5:8:9:10-Tetramethyl-9:10-dihydro-1:2-benzanthracene, 9:10-dihydroxy-, 18.
- Tetramethyldinaphthylene**, 202.
- 3:3':4:4'-Tetramethyl-1:1'-dinaphthylmethane, 299.
- 2:3:4:6-Tetramethyl α - and β -methyl-*d*-galactosides, relation between refractive index and specific rotation in mixtures of, 1543.
- 2:3:4:5-Tetramethyl mucic acid, methyl ester, 1114.
- 1:2:3:4-Tetramethylnaphthalene, and 1-chloro-, 302.
- β -6-(1:2:3:4-Tetramethylnaphthoyl)propionic acid, 302.
- β -6-(1:2:3:4-Tetramethylnaphthyl)butyric acid, 302.
- Tetramethyl-*ar*-octahydridonaphthylene**, 202.
- 1:2:3:4-Tetramethylphenanthrene, 1396.
- 1:2:3:4-Tetramethyl-10-phenanthroic acid, 1398.
- α -2':3':4':5'-Tetramethylphenylcinnamic acid, α -hydroxy-, and its methyl ester, and α -nitro-, 1397.
- Tetramethylisopropylnaphthaquinone**, 1176.

- 1:2:3:4-Tetramethyl-5:6:7:8-tetrahydroanthracene, 302.
 2:2:5:4'-Tetramethyl-3':4':5':6'-tetrahydrodibenz-pyran, 6"-hydroxy-, and its acetyl derivative, 1124.
 Tetraphenylarsonium salts, 1194.
 Tetraphenylphosphonium salts, 1195.
 Tetraphenylstibonium salts, 1195.
*N*⁴-2'-Thiazolylsulphanilamides, synthesis of, 1304.
 Thioacetals, 1550, 1553, 1558.
 Thio-*p*-cresol, piperidine salt, 1528.
 Thionaphthens, preparation of, 323.
 Thiophen derivatives, preparation of, 1385.
 Thiophen-5-acetic acid, 3-chloro-, and 3-hydroxy-, ethyl esters, 1387.
 Thiopheno-2':3'-3-2-thiophen, substituted derivatives of, 305.
 Thiophen-5-*a*-propionic acid, 3-hydroxy-, ethyl ester, 1387.
 Thiophencarboxylic acid, and its derivatives, 307.
 Thiophendicarboxylic acid, and its dimethyl ester, 308.
 Thiophienyl methyl ketone, and its derivatives, 306.
 Thiophienyl ethyl ketone, and its 2:4-dinitrophenyl-hydrazone, 306.
 Thyronine, synthesis of, and its derivatives, 1101.
 Tilden Lecture, 544.
α-Tocopherol, homologues of, 327.
 Toluene, 5-bromo-*p*-amino-, toluenesulphonyl derivative, and 3-bromo-4-nitro-, 450.
 Toluene-3:4-bis(thiotriethylphosphinegold), 1238.
p-Toluenesulphinic acid, potassium hydrogen salt, 862.
α-*p*-Toluenesulphonamidoacetone, *α*-chloro-, 711.
ω-*p*-Toluenesulphonamidoacetophenone, 711.
α-Toluenesulphonamido-*β*-ketohexoic acid, and bromo-, 710.
p-Toluenesulphon-2-chloro-4:6-dinitroanilide, 1523.
N-*p*-Toluenesulphonylaspartic acid, anhydride and methyl ester of, 712.
 2-*p*-Toluenesulphonylbenzamide, 4-chloro-, 1523.
 2-*p*-Toluenesulphonylbenzoic acid, 4-chloro-, 1523.
p-Toluenesulphonylbenzonitriles, chloro-, and nitro-, 1523.
N-*p*-Toluenesulphonylglutamic acid, 709.
dl-*p*-Toluenesulphonylglutamic acid, 711.
N-*p*-Toluenesulphonylisoglutamine, 711.
 3-*p*-Toluenesulphonyl 2-methyl *α*-methylaltrosome, and its 4:6-dibenzoyl derivative, 322.
 6-*p*-Toluenesulphonylnitrobenzene, 2:4-dibromo-, and 2:4-dichloro-, 1527.
p-Toluenesulphonylpiperidinobenzonitriles, 1525.
p-Toluenesulphonyl-*p*-tolylthiobenzonitriles, 1524.
 3-*p*-Toluenesulphonyl 6-triphenylmethyl 2-methyl *α*-methylaltrosome, and its 4-acetyl derivative, 323.
p-Toluidine, oxidation of, by peroxidase, 769.
 4-*p*-Toluidino-2:5-toluquinonebis-*p*-tolylimine, 772.
γ-*p*-Toluyol-*n*-butyric acid, and its derivatives, 452.
 Toluinol dibenzoate, 329.
 2:5-Toliquinonebis-*p*-tolylimine, 4-amino-, 771.
 Tolyli isocyanodichlorides, 193.
δ-*p*-Tolyl-*n*-amyl alcohol, and its derivatives, 452.
δ-*p*-Tolyl-*n*-amyl chloride, 452.
 Tolyazo-bis-acetoximes, metallic derivatives of, 654.
m-Tolyazo-bis-methylethylketoxime, and its metallic derivatives, 655.
N-*o*-Tolylbenzimino-2'-carbomethoxy-6-tolyl ether, 272.
m-Tolyl benzyl ketone, 2:6-dihydroxy-, 247.
γ-*p*-Tolyl-*Δ*^β-crotonolactone, 441.
p-Tolyldi-*p*-bromophenylguanidine, 194.
p-Tolyldiphenylguanidine, 194.
 Tolyliditolylguanidines, 194.
β-*o*-Tolylethyl alcohol, 1241.
δ-*p*-Tolyl-*Δ*^γ-hexenoic acid, 452.
δ-*p*-Tolyl-*n*-hexoic acid, and its esters, 452.
 2-*o*-Tolylidenecyclohexanone, 638.
 2-*o*-Tolylidene-*α*-tetralone, 638.
ζ-*p*-Tolyl-*β*-methylheptane, *dl*-*β*-hydroxy-, and its xenuleurethane, 453.
 2-*p*-Tolyl-1-methyl-5-pyrrolidone, 2-hydroxy-, 441.
 2-*p*-Tolyl-5-pyrrolidone, 2-hydroxy-, 441.
 3-(*p*-Tolylthio)acetanilide, 5-chloro-2-nitro-, 1528.
p-Tolylthiobenzonitriles, chloro-, and nitro-, 1523.
 6-*p*-Tolylnitrobenzene, 2:4-dibromo-, and 2-mono- and 2:4-*d*-chloro-, 1526.
dl-*γ*-*p*-Tolyl-*n*-valeric acid, and its ethyl ester, 452.
 6-Tosyl *α*-methylgalactopyranoside, 623.
 Toxicity, catalytic, and chemical structure, 252, 469.
 Triarylcarinols, reduction of, 874.
 Tri-*p*-bromophenylguanidine, 194.
 (Triethylphosphine)gold, mono- and tri-bromo-, bromoiodo-, chlorobromo-, chlorobromoiodo- and chloroiodo-derivatives, and trichloro-, and triiodo-, 1238.
 Trimethin[2-benzthiazole][2-(3-ethylidihydrobenzthiazole)], 804.
 1:3:8-Trimethoxyanthraquinone, 428.
 Trimethoxydibenzoylmethanes, hydroxy-, 1373.
 5:6:4'- and 5:8:4'-Trimethoxyflavones, 1373.
 2:4:2'-Trimethoxytriphenylcarbinol, preparation of, 878.
 2:4:2'-Trimethoxytriphenylmethane, preparation of, 878.
 3:4:6-Trimethyl *N*-acetylglucosamine, 434.
 2:4:5-Trimethyl aldehyde 3:6-anhydrogalactose, 628.
αγγ-Trimethylallyl alcohol, preparation of, and its derivatives, 1549.
 Trimethylallyl ammonium chloride and picrate, 1559.
 2:2:5'-Trimethyl-4"-*n*-amyldibenzpyran, 5"-hydroxy-, 1121.
 6"-hydroxy-. See Cannabinol.
 2:2:5'-Trimethyl-4"-*n*-amyl-3':4':5':6'-tetrahydrodibenzpyran, 6"-hydroxy-, 1124.
 2:4:5-Trimethyl 3:6-anhydrogalactonic acid, and its methyl ester, 628.
 2:4:5-Trimethyl 3:6-anhydrogalactose dimethylacetal, 628.
 2:3:5-Trimethyl *d*-arabofuranose, 31.
 Trimethyli-1:2-benzanthracenes, photo-oxides, 1126.
 6:9:10-Trimethyl-1:2-benzanthracene, and its picrate, 17.
 2-(2':4':6'-Trimethylbenzylidene)-*α*-hydrindone, 639.
 2-(2':4':6'-Trimethylbenzylidene)-*α*-tetralone, 638.
 Trimethyl-*γγ*-bis(ethylthio)propylammonium picrate, 1564.
 Trimethyl-*β*-chloropropylammonium chloride and picrate, 1562.
 Trimethyl-*γ*-chloropropylammonium chloride and picrate, 1559.
 2:3:4'-Trimethylidibenzpyran, 6"-hydroxy-, 1395.
 2:2:5'-Trimethylidibenzpyran, 5"-hydroxy-, and its derivatives, 1120, 1396.
 6:9:10-Trimethyl-9:10:dihydro-1:2-benzanthracene, 9:10-*d*-hydroxy-, 17.
 2:3:5-Trimethylgalactonic acid, derivatives of, 1116.
 2:3:5-Trimethyl *γ*-galactonolactone, 1116.
 Trimethyl galactose methylphenylphenylosazone, 1481.
 3:4:6-Trimethyl glucosamine, *N*-benzoyl derivative, 31. hydrochloride, 31, 434.
 3:2:6:6-Trimethyl-*Δ*¹-cyclohexenyl-*β*-methyl-*Δ*^{αγ}-butadiene, 1240.
 3:2:6:6-Trimethyl-*Δ*¹-cyclohexenyl-*β*-methyl-*Δ*^γ-buten-*β*-ol, 1240.
 3:2:6:6-Trimethyl-*Δ*¹-cyclohexenyl-*β*-phenyl-*Δ*^γ-buten-*β*-ol, 1241.
 Trimethyl-*γ*-hydroxypropylammonium chloride and picrate, 1559.
 2:3:5-Trimethyl methylgalactofuranoside, 1116.

2:3:5-Trimethyl β -methylgalactofuranoside, methyl ester, 1112, 1117.
 2:3:4-Trimethyl β -methylgalactopyranoside, 1511.
 2:3:5-Trimethyl β -methylgalacturonoside, methyl ester, synthesis of, 1114.
 3:4:8-Trimethyl α -methylglucosaminide, *N*-acetyl derivative, 30.
 2:3:5-Trimethyl mucic acid, derivatives of, 1112, 1117.
 1:2:3-Trimethylnaphthalene, 1-chloro-, 302.
 1:3:4-Trimethylnaphthalene, 1-chloro-, 299.
 (Trimethylphosphine)gold, bromo-, 1237.
 Trimethyl- Δ^2 -propenylammonium salts, 1562.
 2:3:5-Trimethyl *l*-rhamnonic acid phenylhydrazide, 1051.
 2:3:5-Trimethyl saccharo- γ -lactone, methyl ester, 1045.
 2:2:5'-Trimethyl-3':4':5':6'-tetrahydrodibenzpyran, 5'-hydroxy-, 1396.
 5''- and 6''-hydroxy-, and their acetyl derivatives, 1124.
r- $\alpha\beta\beta$ -Triphenyl- α -benzylethane, *r*- β -hydroxy-, 843.
 Triphenylcarbinol, *p*-fluoro-, 1254.
 Triphenylmethyl, stability of, effect of methyl groups on, 883.
 Triphenylmethyl, fluoro-, 1249.
 Triphenylmethyl chloride, action of formic acid on, 1333.
p-fluoro-, 1254.
 ethyl ether, action of formic acid on, 1333.
 peroxide, *p*-fluoro-, 1255.
 Triphenylphosphine, colour reactions of, 1374.
 (Tri-*n*-propylphosphine) gold, chlorodibromo-, 1238.
 Tri-*n*-propylphosphinetri-*n*-amylphosphine- μ -di-iodo-cadmium-mercury, diiodo-, 1233.
 Tripropylphosphinetripropylarsine- μ -di-iodocadmium-mercury, diiodo-, 1234.
aaay-Tris(ethylsulphonyl)propane, 1557.
*aa\beta-Tris(ethylthio)propane, 1555.
aaay-Tris(ethylthio)propane, 1557.
 Triterpene group, 230, 795.
 Triterpene resins. See under Resins.
p-Tritolylenediarsine, 1190.
 Tritolylguanidines, 194.
 2:4:6-Tri-*p*-tolylthionitrobenzene, 1527.
 6-Trityl methylgalactofuranoside, 1116.
 6-Trityl 2:3:5-trimethyl methylgalactofuranoside, 1116.
 6-Trityl 2:3:4-trimethyl β -methylgalactopyranoside, 1510.
 Tropane, dihydroxy-, derivatives of, 1156.
r-Tropic acid, methyl ester, action of Grignard reagents on, 840.
 Tuberculosis, chemotherapy of, 505.*

U.

Uridine, preparation of, 747.
 Uridine 3- and 5-phosphates, synthesis of, 746.
 Uridylic acid, synthesis of, 746.

V.

ValeNCY, theories of, 544.
 Valeroidine, and its derivatives, 1156.
Vallesia dichotoma and *glabra*, aspidospermine from, 1051.
 Vanadic acid. See under Vanadium.
 Vanadium tetroxide, amphoteric nature of, 758.
 Vanadous oxide, basic nature of, 895.
 Vanadous chloride, hydroxide and sulphate, 761.
 Vanadic acid, 764.
 Vanadium organic compounds, with azo-dyes, 1064.
 Vanadium ions, oxidation-reduction potentials of, 1532.
 Velocity of reaction in solution, effect of alkyl groups on, 339.
 Vitamins, antirachitic, synthesis of compounds related to, 10.
 Vitamin-E, 327.

W.

Walden inversion in altrose series, 319.
 Water, evaporation of, through unimolecular films, 106.
 vapour, reaction of, with carbon, 177.
 Wood, "insoluble red," chemistry of, 787.

X.

o-Xylene, 3-bromo-, preparation of, 17.

Y.

Yeast ribonucleic acid, constitution of, 746.

Z.

Zea mays, stigmas, constituents of petroleum extracts of, 1545.
 Zinc sulphate, hydrolysis of, 580.
 Zingiberene, spectrum of, absorption, 1462.
 Zymostane, 1488.
 Zymostane- $C_4||C_3$ -dicarboxylic acid, and its methyl ester, 1488.
 Zymostanol, and its derivatives, 1487.
 Zymostanone, and bromo-, 1488.
 α - and β -Zymostenols, and their derivatives, 1486.
 Zymosterol, constitution of and its derivatives, 1482.