

INDEX TO VOLUME XLI.

INDEX OF NAMES.

- Abelmann, A.** See Grignard, ---, and Abelmann, A.
- Acél, D.** Detection and estimation of nitrites and nitrates in meats, sausages, etc., 308.
- Adams, M.** Composition of wood turpentine, 9.
- Adolph, W. H.** Estimation of fluorine, 16.
- Agcaoli, F.** See Brill, H. C., and Agcaoli, F.
- Allen, E. R.** See Davisson, B. S., Allen, E. R., and Stuttlefield, B. M.
- Alt, A. D.** See Malinckrodt, E., and Alt, A. D.
- Anderson, R. P.** Pipettes especially adapted for use with alkaline pyrogallol, 190.
- Anderson, R. P.** Reagents for use in gas analysis. III.: Specific absorption of alkaline pyrogallol in various pipettes, 183.
- Anderson, R. P., and Riffe, J.** Reagents for use in gas analysis. II.: Chromous chloride, 183.
- Angus, G. B.** See Watt, H. E., and Angus, G. B.
- Armstrong, E. F.** See Hall, A. D., Armstrong, E. F., Armstrong, H. E., Keeble, E., and Russell, E. J.
- Armstrong, H. E.** See Hall, A. D., Armstrong, E. F., Armstrong, H. E., Keeble, E., and Russell, E. J.
- Arny, H. V., and Ring, C. H.** Colour standards of colorimetric assays, 222.
- Arragon, C.** Analysis of spices, 279.
- Artis, B.** Nitrogen, chlorine, and sulphates in rain and snow, 83.
- Atkins, W. R. G.** The application of the method of constant boiling-point mixtures to the qualitative analysis of certain mixed organic liquids, 334.
- Atkins, W. R. G.** See Wilson, E. G., and Atkins, W. R. G.
- Averitt, S. D.** Separation and estimation of polysulphides and thiosulphate in lime-sulphur solutions, 288.
- Averitt, S. D.** See Blumenthal, P. L., and Averitt, S. D.
- Ayers, S. H.** See Thom, C., and Ayers, S. H.
- Azzarello, E.** Estimation of moisture in resinous woods, 389.
- Bach, A.** New reaction of urine, 173.
- Backer, H. J.** Molecular weights of certain vegetable oils, 47.
- Backer, H. J.** Relationship between the physical and chemical constants of fats, 315.
- Bacon, W.** See Bevan, E. J., and Bacon, W.
- Bacon, W.** See also Sindall, R. W., and Bacon, W.
- Bailey, C. H.** Method for the determination of the strength and baking qualities of wheat flour, 134.
- Bailey, E. M.** See Street, J. P., and Bailey, E. M.
- Baker, J. L., and Hulton, H. F. E.** The estimation of pentose or pentosans by means of Fehling's Solution, 294.
- Balbiano, L.** Graphitic Acid, 51.
- Barendrecht, H. P.** Simple hydrogen electrode, 111.
- Barnebey, O. L.** Differential iodimetry. Estimation of periodates, iodates, bromates, and chlorates in presence of each other, 106.

- Barnes, J. H., and Singh, Arjan.** "Poli Oil," a new adulterant of ghee—Indian clarified butter-fat, 72.
- Baumann, K., and Grossfeld, J.** Estimation of benzoic acid in animal foodstuffs, 76.
- Beal, G. D., and Beebe, C. K.** Oil of the wild-grape seed (*Vitis Riparia*), 47.
- Beal, G. D., and Brady, E.** Estimation of alkaloids by the hydrochloride method, 132.
- Beam, W., and Freak, G. A.** Improved hæmin test for blood, 92.
- Beebe, C. K.** See Beal, G. D., and Beebe, C. K.
- Belfit, R. W.** Direct estimation of rubber in a compound, 215.
- Bennett, A. H.** The estimation of potassium in presence of other substances, 165.
- Berry, A. J.** Volumetric Analysis (Review), 157.
- Bevan, E. J., and Bacon, W.** The manufacture of chemical filter-paper, 159.
- Bichowsky, F. R. Von, and Storch, H.** Improved form of gas-washing bottle, 57.
- Bigelow, W. D.** Tin in canned foods, 342.
- Bingham, E. C., Schlesinger, H. I., and Coleman, A. B.** Sources of error in viscosity measurement, 85.
- Blackman, P.** Comparative method for determining vapour densities, 24.
- Blake, J. C.** Digestibility of bread. I.: Salivary digestion *in vitro*, 248.
- Blish, M. J.** Proteins of wheat flour and their relation to baking strength, 210.
- Blum, W.** Estimation of aluminium as oxide, 286.
- Blumenthal, P. L., and Averitt, S. D.** Estimation of thiosulphate sulphur in lime-sulphur solutions by iodine titration, 350.
- Blunck, G.** Colorimetric method for the detection of potato starch, 312.
- Boerner, E. G.** Device for sampling grain seeds and other material, 154.
- Bogert, M. T., and Scatchard, G.** Sensitive indicator for acidimetry and alkali-metry and for determination of hydrogen ion concentration, 315.
- Bogitch, F.** See Le Chatelier, H., and Bogitch, F.
- Bonnet, L.** Estimation of essential oils in liqueurs, 276.
- Boughton, E. W.** Estimation of volatile "thinner" in oil varnish, 318.
- Bracewell, G. A.** See Richardson, F. W., and Bracewell, G. A.
- Brady, E.** See Beal, G. D., and Brady, E.
- Braudo, E. M.** See Rakuzin, M. A., and Braudo, E. M.
- Braun, J. Von.** Benzoyldihydromethylketol hydrazine. A new reagent for galactose, 385.
- Brauner, B.** Titrations with permanganate in strongly alkaline solutions, 258.
- Bray, G. T., and Elliott, F. L.** Some new oil-seeds derived from American Palms, 298.
- Breidahl, H. G. D.** Hopkins-Cole Reaction for protein, 101.
- Brier, J. C.** Adulteration of Chinese wood oil, 13.
- Brill, H. C.** Salicylic acid reaction of Soya Beans, 381.
- Brill, H. C., and Agcaoli, F.** Philippine Beeswax, 341.
- Brodick-Pittari, N. A.** Method for detecting the admixture of goat's milk with cow's milk, 308.
- Brooks, B. T.** Zingiberol: A new sesquiterpene occurring in essential oil of ginger, 90.
- Browning, P. E.** Qualitative detection and separation of platinum, arsenic, gold, selenium, tellurium and molybdenum, 84.
- Bruckmiller, F. W., and Jackson, L. E.** Modification of Whipple's Method of estimating organic nitrogen in sewage, 254.
- Bruhns, G.** Potassium dichromate as an analytical standard, 347.
- Bruhns, G.** Titrations with oxalic acid, using methyl orange as indicator, 317.
- Buckley, J. P.** See Holland, E. B., Reed, J. C., and Buckley, J. P.
- Buckley, J. P., Junr.** See Holland, E. B., Reed, J. C., and Buckley, Junr.
- Buell, M. V. R.** See Lenher, V., and Buell, M. V. R.

- Bühn, T.** See Kirpal, A., and Bühn, T.
- Bull, H.** Estimation of glycerol in oils as sodium glyceroxide, 343.
- Burrell, G. A., and Jones, G. W.** Estimation of air, water-vapour, and nitrous oxide in mixtures of these three constituents, 318.
- Burri, R., and Thaysen, A. C.** Comparative experiments on the Pasteurisation and biorisation of milk, 10.
- Burrell, G. A., and Oberfell, G. G.** Use of copper oxide for fractionation combustion of hydrogen and carbon monoxide in gas mixtures, 183.
- Cahen, E., and Hurlley, W. H.** Estimation of calcium, 287.
- Cain, J. R., and Cleaves, H. E.** Estimation of carbon in steels and irons by direct combustion in oxygen at high temperature, 218.
- Calhane, D. F., and Lavene, H. A.** Electrically-Heated bomb furnace, 112.
- Carlinfanti, C., and Scelba, M.** Estimation of small quantities of alkaloids, 273.
- Carlinfanti, E.** Estimation of small quantities of alkaloids, 273.
- Castets, J.** New reaction of picric acid, and its applications, 144.
- Chancel, F.** Estimation of zinc by electrolysis, 187.
- Chapin, R. M.** Decomposition of tetrathionates in alkaline solution as a source of error in certain iodine titrations, 150.
- Chapin, R. M.** New methods for analysis of lime-sulphur solutions, 184.
- Chapman, A. C.** Annual address of the retiring President, 31.
- Christie, A. W.** Estimation of phosphorus in plant materials, 247.
- Clapp, F. C.** Non-Spattering wash-bottle, 323.
- Cleaves, H. E.** See Cain, J. R., and Cleaves, H. E.
- Cline, M.** Paper fibre analysis, 15.
- Coleman, A. B.** See Bingham, E. C., Schlesinger, H. I., and Coleman, A. B.
- Coleman, D. A.** See Kopeloff, N., Lint, H. C., and Coleman, D. A.
- Collins, R. J., and Hanzlik, P. J.** Colorimetric method for the determination of free formaldehyde and Hexamethylenetetramine, 283.
- Comte, —.** Colour reaction of croton oil, 275.
- Cook, F. C.** Boron: Its absorption and distribution in plants, and its effect on growth, 137.
- Cooledge, L. H.** Agglutination test as a means of studying the presence of *Bacterium Abortus* in milk, 91.
- Conant, J. B.** See Kelley, G. L., and Conant, J. B.
- Cox, A. W.** See Savill, C. A., and Cox, A. W.
- Cramer, W.** Cause and significance of an abnormal reaction obtained in testing urine for sugar with Fehling's Solution, 95.
- Cramer, W.** New test for reducing sugars in urine, 97.
- Cranfield, H. T.** The effect of feeding on the composition of butter: Decorticated ground nut cake and decorticated cotton cake, 336.
- Cranfield, H. T., and Taylor, M. G. D.** The effect of feeding on the composition of milk and butter: Dried yeast and decorticated cotton meal, 240.
- Crawford, F. M.** See Schoch, E., and Crawford, F. M.
- Cruess, W. V., and McNair, J. B.** Investigations on fruit jellies, 205.
- Curtman, L. J., and Daschavsky, P.** Study of the silver arsenate test for arsenic, 286.
- Cusmano, A.** See Libèri, G., Cusmano, A., Marsiglia, T., and Zay, C.
- Daish, A. J.** See Davis, W. A., Daish, A. J., and Sawyer, G. C.
- Danills, F.** An adiabatic calorimeter, 320.
- Daschavsky, P.** See Curtman, L. J., and Daschavsky, P.
- Daudt, H. W.** Effect of ammonium chloride upon ferric and aluminium hydroxides during ignition, 16.

- Davis, W. A.** Estimation of carbohydrates. V.: The supposed precipitation of reducing sugars by basic lead acetate, 382.
- Davis, W. A.** Studies of the formation and translocation of carbohydrates in plants. II.: The dextrose-lævulose ratio in the mangold, 93.
- Davis, W. A.** Use of enzymes and special yeasts in carbohydrate analysis, 138.
- Davis, W. A., and Prescott, J. A.** Loss of phosphoric acid during fusion with ammonium fluoride, 388.
- Davis, W. A., and Sawyer, G. C.** Studies of the formation and translocation of carbohydrates in plants. III.: The carbohydrates of the leaf and leaf-stalks of the potato, 94.
- Davis, W. A., Daish, A. J., and Sawyer, G. C.** Studies of the formation and translocation of carbohydrates in plants. I.: The carbohydrates of the mangold leaf, 92.
- Davison, B. S.** Volumetric estimation of nitrites, 349.
- Davison, B. S., Allen, E. R., and Stuttlefield, B. M.** Aeration method for ammonia, 386.
- Denigès, G.** General reaction of alkaloids containing a phenolic group (morphine, cupreine, adrenaline, etc.), 343.
- Denigès, G.** Micro-Reactions of carbon disulphide, 12.
- Denigès, G.** New test for isothiocyanates, 14.
- Deuss, J. J. B.** Amount of stalk in tea, 78.
- Dhommée, R.** Estimation of albumin in urine, 173.
- Dittler, E., and Graffenried, A. Von.** Estimation of tungsten by Fieber's Method. Separation of tin from tungsten, 351.
- Dorta, G.** See Fachini, S., and Dorta, G.
- Dott, D. B.** Estimation of tannin, 52.
- Dover, M. V., and Marden, J. W.** Comparison of the relative efficiency of laboratory reflux condensers, 352.
- Dox, A. W., and Plaisance, G. P.** Comparison of barbituric acid, thiobarbituric acid, and malonylguanidine as quantitative precipitants for furfural, 384.
- Drogin, I., and Rosanoff, M. A.** Detection and estimation of halogens in organic compounds, 148.
- Drummond, J. C.** Volumetric estimation of total sulphur and sulphates in small quantities of urine, 96.
- Dudley, H. W.** Quantitative estimations of glyoxalase in blood, 91.
- Dunstan, A. E., and Thole, F. B.** A Senior Experimental Chemistry (Review), 353.
- Dyer, D. C.** Progressive oxidation of cold-storage butter, 377.
- Eckstein, H. C.** See Grindley, H. S., and Eckstein, H. C.
- Edgar, G.** Estimation of vanadic acid after reduction by metallic silver, 290.
- Edgar, G.** Rapid method for the estimation of copper and iron, 181.
- Edwards, A.** The estimation of benzene and toluene in commercial mixtures, 250.
- Ehrlich, J.** Estimation of alcohol in the presence of phenol, 212.
- Elledge, H. G., and Isherwood, J. J.** Surface tension measurements of solutions of soap and soap-alkali mixtures, 352.
- Elliott, F. L.** See Bray, G. T., and Elliott, F. L.
- Ellis, R. H.** Potash in banana stalks and skins, 211.
- Elsdon, G. D.** Note on human milk, 74.
- Enell, H.** Volumetric estimation of cadmium and zinc, 82.
- Engfeldt, N. O.** Detection of acetone by Frommer's Test, 80.
- Engle, W. D., and Gustavson, R. G.** Volumetric estimation of cobalt, 386.
- Eoff, J. R.** See Hartmann, B. G., Eoff, J. R., and Ingle, M. J.
- Espenhahn, E. V.** Estimation of sulphur in spent oxide, 150.
- Ewers, E.** Estimation of starch in raw potatoes, 136.

- Fachini, S., and Dorta, G.** Oil from the fruit of the Canadian vine, 309.
- Falk, K. G., and Sugiura, K.** Comparative study of aeration and heat distillation in the Kjeldahl Method for the estimation of nitrogen, 186.
- Fazi, R. de.** New reaction of aldehydes, 250.
- Fellenberg, T. Von.** Colorimetric determination of cinnamaldehyde in cinnamon, 274.
- Fellenberg, T. Von.** Colorimetric determination of vanillin in vanilla, 280.
- Fendler, G.** Rinck's Method for the detection of methyl alcohol, 316.
- Fendler, G., and Stüber, W.** Estimation of caffeine in coffee, 88.
- Ferrari, F.** Rapid estimation of iron in presence of organic substances, 82.
- Fichter, F., and Osterwalder, R.** Precipitation of magnesium salts by ammonium carbonate, 319.
- Field, A. L.** See Fieldner, A. C., and Field, A. L.
- Fieldner, A. C., and Field, A. L.** Method and furnace for the determination of the softening temperature of coal ash under fuel-bed conditions, 16.
- Fiske, C. H.** Estimation of urea in urine by the urease method, 79.
- Formaněk, G.** See Knight, G. W., and Formaněk, G.
- Fouque, G.** Device for subliming and weighing small quantities of iodine, 322.
- Francis, C. K., and Smith, O. C.** Determination of the gelatinising temperature of starches by means of a thermo-slide, 248.
- Francis, F., Geake, F. H., and Roche, J. W.** Determination of the concentration of hydroxyl ions, 22.
- François, M.** Detection of glycerides by the magenta-sulphurous acid reagent, 141.
- Freak, G. A.** See Beam, W., and Freak, G. A.
- Frederick, R. C.** Estimation of carbon dioxide in air by Haldane's Apparatus, 105.
- Frost, W. D.** Rapid method of counting bacteria in milk, 48.
- Furman, N. H.** See McCay, L. W., and Furman, N. H.
- Gawalowski, A.** Estimation of tannin in tanning materials, 52.
- Geake, F. H.** See Francis, F., Geake, F. H., and Roche, J. W.
- Ghose, T. P.** See Singh, P., and Ghose, T. P.
- Givens, M. H.** Modification of Rose's Method for the estimation of pepsin, 49.
- Glenny, A. T., and Walpole, G. S.** Detection and concentration of antigens by ultrafiltration, pressure dialysis, etc., with special reference to diphtheria and tetanus toxins, 137.
- Gooch, F. A.** Representative Procedures in Quantitative Chemistry (Review), 191.
- Gorini, C.** Resistance of non-sporing bacteria in milk to the action of heat, 381.
- Gothe, F.** Properties of honey diastase, 312.
- Gothe, F.** The enzymes of honey, 312.
- Graefe, H.** Analysis of copper-aluminium-zinc alloys, 106.
- Graffenried, A. Von** See Dittler, E., and Graffenried, A. von.
- Greenish, H. G.** Microscopical methods, with special reference to the examination of drugs, 195.
- Griffiths-Jones, E.** See Hogan, G., and Griffiths-Jones, E.
- Grignard, —, and Abelmann, A.** Simultaneous estimation of carbon, hydrogen, and mercury in organo-mercuric compounds, 98.
- Grimmer, W.** Peroxidase Reaction in milk, 341.
- Grimmer, W.** Peroxydase reaction in milk, 172.
- Grindley, H. S., and Eckstein, H. C.** The non-protein nitrogenous constituents of feeding-stuffs, 277.
- Grindley, H. S., and Slater, M. E.** Estimation of the amino-acids of feeding-stuffs by the Van Slyke Method, 46.
- Groll, T. M.** Presence of urease in Soya beans, 140.
- Grossfeld, J.** Modification of Mohler's Reaction for benzoic acid, 97.

- Grossfeld, J.** See Baumann, K., and Grossfeld, J.
- Guignard, L.** Detection and estimation of hydrocyanic acid in beans, 380.
- Gupta, C. M.** Vocabulary of Indian Medicinal Substances and Drugs (Review), 326.
- Gustavson, R. G.** See Engle, W. D., and Gustavson, R. G.
- Hager, G., and Kern, J.** Estimation of dicyanodiamide in calcium cyanamide by Caro's Method, 346.
- Hägglund, E.** Analysis of acid calcium bisulphite solutions, 256.
- Hall, A. D., Armstrong, E. F., Armstrong, H. E., Keeble, E., and Russell, E. J.** Study of plant enzymes; particularly with relation to oxidation. Test for distinguishing dextrose and levulose, 249.
- Hanzlik, P. J.** See Collins, R. J., and Hanzlik, P. J.
- Harding, V. O., and Warneford, F. H. S.** Ninhydrin Reaction with amino-acids and ammonium salts, 283.
- Harris, J. B.** See Meade, G. P., and Harris, J. B.
- Hartman, M. L.** Detection of tungsten, 320.
- Hartman, M. L.** Qualitative and quantitative analysis of tungsten, 289.
- Hartmann, B. G., Eoff, J. R., and Ingle, M. J.** Estimation of tartaric acid, 216.
- Hartwagner, F.** See Vanino, L., and Hartwagner, F.
- Hassler, J. W.** See Wickenden, L., and Hassler, J. W.
- Hatos, G.** See Schick, P., and Hatos, G.
- Hatschek, E.** An Introduction to the Physics and Chemistry of Colloids (Review), 194.
- Hatschek, E.** See Willows, R. S., and Hatschek, E.
- Hayes, H. C., and Lewis, G. W.** New form of viscosimeter, 391.
- Haynes, M. H.** See Newcomb, E. L., and Haynes, M. H.
- Heiduschka, —, and Heinich, —.** Estimation of the amount of offals in the flour of cereals, 133.
- Heinich, —.** See Heiduschka, —, and Heinich, —.
- Hepworth, T. C.** See Mitchell, C. A., and Hepworth, T. C.
- Hersey, C. B.** Comparison of methods for the estimation of casein in milk, 203.
- Hill, D. V.** Separation of potassium and sodium by the use of aniline perchlorate and the subsequent estimation of the sodium, 55.
- Hilpert, S.** Solubility of naphthalene in ammonia, 142.
- Hoenig, A.** Reduction of ferric salt solutions, and titration of the reduced solutions with permanganate, 54.
- Hogan, G., and Griffiths-Jones, E.** Fat of Egyptian buffalo milk, 307.
- Hogan, G.** See Pappel, A., and Hogan, G.
- Holde, D.** The examination of hydrocarbon oils and of saponifiable fats and waxes (Review), 60.
- Holland, E. B., Reed, J. C., and Buckley, J. P., Junr.** Estimation of stearic acid in butter fat, 209.
- Holland, E. B., Reed, J. C., and Buckley, J. P.** Improved methods for fat analysis, 252.
- Homberger, A. W., and Munch, J. C.** Quantitative estimation of morphine in the various organs when injected into cats and rabbits, 342.
- Hulett, G. A.** See Swanson, A. A., and Hulett, G. A.
- Hulton, H. F. E.** See Baker, J. L., and Hulton, H. F. E.
- Hurtley, W. H.** See Cahen, E., and Hurtley, W. H.
- Hutin, A.** Estimation of free sulphur in antimony sulphide pigments, 109.
- Incze, G.** Estimation of copper in commercial copper sulphate, 52.
- Ingle, H.** A manual of oils, resins, and paints. Vol. I.: Analysis and valuation. With diagrams by the author and J. A. L. Sutcliffe (Review), 25.

- Ingle, M. J.** See Hartmann, B. G., Eoff, J. R., and Ingle, M. J.
Irvine, J. C. Apparatus for filtration under reduced pressure, 111.
Isherwood, J. J. See Elledge, H. G., and Isherwood, J. J.
Issoglio, G. Analysis of rancid fats, 304.
- Jackson, L. E.** See Bruckmiller, F. W., and Jackson, L. E.
Jaenpretre, J. Use of the iodic acid-starch reaction in the examination of wine and vinegar, 379.
James, C. See Willand, P. S., and James, C.
James, H. W. Estimation of toluene: Application of the method to benzene and xylene, 144.
Jamieson, G. S. Volumetric estimation of tin by potassium iodate, 259.
Jarrell, T. D. Perchlorate and gravimetric cobalti-nitrite methods for determination of potash, 83.
Jodidi, S. L., and Kellogg, E. H. General applicability of the paper pulp filter to quantitative analysis, 222.
Johnson, M. O. Estimation of small quantities of hydrocyanic acid, 252.
Johnston, J. Estimation of carbonic acid, combined and free, in solution, particularly in natural waters, 255.
Jones, F. B. See Spielmann, P. E., and Jones, F. B.
Jones, G. W. See Burrell, G. A., and Jones, G. W.
Jordan, S. Analysis and composition of some cigarette papers, 345.
- Kay, S. A., and Newlands, S. H.** Estimation of calcium and magnesium in natural waters, 221.
Kay, S. A., and Newlands, S. H. Estimation of hardness of natural waters, and the use of methyl red as an indicator, 220.
Keeble, E. See Hall, A. D., Armstrong, E. F., Armstrong, H. E., Keeble, E., and Russell, E. J.
Kelley, G. L., and Conant, J. B. Electrometric titration of vanadium, 108.
Kelley, G. L., and Conant, J. B. Use of diphenylglyoxime as indicator in the volumetric estimation of nickel by Frevet's Method, 348.
Kellogg, E. H. See Jodidi, S. L., and Kellogg, E. H.
Kern, J. See Hager, G., and Kern, J.
Kerr, R. H. Detection of arachidic acid, 381.
Kirpal, A., and Bühn, T. Estimation of the methoxy group in compounds containing sulphur, 253.
Klostermann, M., and Opitz, H. Estimation of phytosterol in vegetable oils, 317.
Klostermann, M., and Scholtz, K. Detection of saccharin and its estimation, 309.
Knapman, F. G. W., and Randall, E. L. Estimation of ferro- and ferricyanides in the presence of cyanides and thiocyanates, 253.
Knapp, A. W. Simple method of determining the melting-points of fats, etc., 58.
Knight, G. W., and Formaněk, G. Estimation of cane sugar in condensed milk, 132.
Knight, G. W., and Lincoln, C. T. Estimation of methyl and ethyl alcohol in spirit varnishes, 14.
Knocke, A. See Vaubel, W., and Knocke, A.
Kohn-Abrest, E. Detection of picric acid in urine and viscera, 313.
Kopeloff, N., Lint, H. C., and Coleman, D. A. Separation of soil protozoa, 11.
Kraemer, H. Scientific and Applied Pharmacognosy (Review), 227.
Kreis, H. Detection of artificial colours in wines, 380.
Kreisinger, H., and Ovitz, F. K. Sampling and analysing Flue Gases (Review), 229.
Krieger, A. Testing the purity of turpentine, 347.
Kunz, R. Estimation of citric acid in milk, 378.

- Langworthy, C. F.**, and **Milner, R. D.** Improved respiration calorimeter for use in experiments with man, 49.
- Langworthy, C. F.**, and **Milner, R. D.** Respiration calorimeter, partly automatic, for the study of metabolic activity of small magnitude, 390.
- Lavene, H. A.** See Calhane, D. F., and Lavene, H. A.
- Le Chatelier, H.**, and **Bogitch, F.** Estimation of carbon in steel by Eggertz Method, 218.
- Le Roy, G. A.** Detection of free chlorine in town service waters, 182.
- Lenci, E.** Rapid and exact method of estimating alkaloids in cinchona bark, 78.
- Lenher, V.**, and **Buell, M. V. R.** Studies of soap solutions, 311.
- Lenher, V.**, and **Meloche, C. C.** Volumetric estimation of cerium by means of potassium permanganate, 82.
- Lenher, V.**, and **Truog, E.** Estimation of silica, 219.
- Lenher, V.** See Rosenberg, L., and Lenher, V.
- Lewis, G. W.** See Hayes, H. C., and Lewis, G. W.
- Leys, A.** Differentiation and valuation of erythrosin and Bengal Rose, 99.
- Liberi, G.**, **Cusmano, A.**, **Marsiglia, T.**, and **Zay, C.** Presence of copper in tomatoes and tomato preserves, 379.
- Lincoln, C. T.** See Knight, G. W., and Lincoln, C. T.
- Lind, S. C.** Methods for the determination of radium. II.: The emanation method, 56.
- Lindet, L.** Estimation of fat in cream, 277.
- Lint, H. C.** See Kopeloff, N., Lint, H. C., and Coleman, D. A.
- Long, J. H.** Possible source of error in colorimetric observations, 153.
- Long, J. H.** Simple cell for the determination of hydrogen ion concentration, 188.
- Losanitch, M. S.** New safety valve, 223.
- Lovibond, J. W.** Light and Colour Theories (Review), 291.
- Lowenstein, A.**, and **Vollersten, J. J.** Effect of free fatty acids upon the flash and fire points of animal fats and oils, 14.
- Lowy, A.** Automatic pipette, 321.
- Luce, E.** Estimation of gum in the officinal syrup of gum, 340.
- Lunge, G.** Technical chemist's handbook: Tables and methods of analysis for manufacturers of Inorganic Chemical Products (Review), 396.
- Maass, O.** Automatic vacuum pump, 59.
- MacDonnell, C. C.** See Roark, R. C., and MacDonnell, C. C.
- MacFadden, A. W. J.** Report on the work of inspectors of foods for the year 1914-15, 154.
- MacFarlane, N. C.** See Snell, J. F., MacFarlane, N. C., and Van Zoeren, G. J.
- MacMichael, R. F.** Direct-Reading viscosimeter, 24.
- Malinckrodt, E.**, and **Ait, A. D.** Estimation of small amounts of alcohol and water in ether, 342.
- Mallinson, H. C.** Estimation of soluble nitrocellulose in guncotton, 214.
- Manley, C. H.** The densities and refractive indices of the Leamington Spa water., 267.
- Mann, E. W.** Southall's Materia Medica (Review), 265.
- Maquenne, L.** Action of cane-sugar on alkaline copper solutions, 12.
- Maquenne, L.** Comparative actions of cane sugar and invert sugar on alkaline-copper solutions, 178.
- Maquenne, L.** Estimation of reducing sugars in presence of an excess of cane sugar, 179.
- Maquenne, L.** Presence in industrial sugars of reducing sugars other than invert-sugar, 180.
- Marcille, R.** Estimation of the iodine value of essential oils, 276.

- Marden, J. W.** Heat of bromination of fats and oils, 176.
- Marden, J. W.** See Dover, M. V., and Marden, J. W.
- Marotta, D.** Casein and its technical application, 383.
- Marsiglia, T.** See Liberi, G., Cusmano, A., Marsiglia, T., and Zay, C.
- Mazzaron, A.** New method of analysing oils, 135.
- McCay, L. W., and Furman, N. H.** Use of hydrofluoric acid in separation of some heavy metals from tin, antimony, tungsten, and molybdenum by means of the electric current, 149.
- McIlhiney, P. C.** Unit of viscosity measurement, 223.
- McKie, P. V.** See Orton, K. J. P., and McKie, P. V.
- McKillop, M.** Food Values: What they are and how to calculate them (Review), 355
- McNair, J. B.** See Cruess, W. V., and McNair, J. B.
- Meade, G. P., and Harris, J. B.** Gravimetric estimation of reducing sugars in cane products, 247.
- Medinger, P.** Detection and estimation of very small amounts of phosphoric acid, especially in water, 20.
- Meloche, C. C.** See Lenher, V., and Meloche, C. C.
- Mendel, L. B.** Changes in the Food-Supply and their Relation to Nutrition (Review), 393.
- Meunier, J.** Detection of small quantities of selenium and its distinction from arsenic, 389.
- Middleton, A. R., and Miller, H. L.** Detection of nickel in cobalt salts, 348.
- Miller, H. L.** See Middleton, A. R., and Miller, H. L.
- Miller, J.** Estimation of dissolved oxygen in water, 222.
- Milner, R. D.** See Langworthy, C. F., and Milner, R. D.
- Milroy, T. H.** Reaction and calcium content of milk as factors in the coagulation process, 95.
- Mitchell, C. A.** Vinegar: Its Manufacture and Examination (Review), 324.
- Mitchell, C. A., and Hepworth, T. C.** Inks: Their Composition and Manufacture, (Review), 229.
- Mohs, K.** Estimation of the fat content of dried whole milk, 378.
- Monnier, A.** Use of titanium trichloride in volumetric analysis, 260.
- Moor, C. G., and Partridge, W.** Aids to Bacteriology (Review), 354.
- Morgan, J. S.** Laboratory circulating pump, 23.
- Morris, J. L.** New salt of uric acid and its application to the analysis of uric acid and phenol, 282.
- Moses, A. J.** Tables for the determination of gems and precious or ornamental stones without injury to the specimen, 18.
- Moses, D. V.** See Plaisance, G. P., and Moses, D. V.
- Muller, J. A.** Analysis of a mixture of alkali sulphides, thiosulphates, and dithionates, 104.
- Mulliken, S. P.** A Method for the Identification of Pure Organic Compounds. (Vol. II.), (Review), 392.
- Munch, J. C.** See Homberger, A. W., and Munch, J. C.
- Murray, B. L.** Electrolytic determination of bismuth in bismuth β -naphthol, 204.
- Murray, B. L.** Electrolytic determination of mercury in mercury oleates, 204.
- Murray, B. L.** Electrolytic determination of mercury in mercury salicylates, 204.
- Muttele, C. F.** Estimation of essential oils (essences) in liqueurs, 275 and 305.
- Neidle, M.** Temperature effect in dialysis, and a simple rapid dialyser, 291.
- Newcomb, E. L., and Haynes, M. H.** *Hyoscyamus* cultivated in Minnesota, 79.
- Newington, F. H.** Estimation of free alkali in soap, 88.
- Newlands, S. H.** See Kay, S. A., and Newlands, S. H.

- Norris, J. F.** Experimental Organic Chemistry (Review), 86.
- Nowak, C. A.** New Method of determining the proteolytic strength of germinated grain in technical analysis: Acid Ratio, 10.
- Oberfell, G. G.** See Burrell, G. A., and Oberfell, G. G.
- Okada, S.** Optimal conditions for the proteoclastic action of taka-diastrase, 281.
- Okada, S.** Optimal reaction for pepsin, 281.
- Olig, A.** Detection of phytosterol by precipitation with digitonin, 317.
- Opitz, H.** See Klostermann, M., and Opitz, H.
- Orton, K. J. P., and McKie, P. V.** Estimation of mixtures of paracetaldehyde and acetal, 143.
- Osterwalder, R.** See Fichter, F., and Osterwalder, R.
- Ostwald, W.** A Hand-Book of Colloid Chemistry (Review). Translated by M. H. Fischer, 353.
- Ovitz, F. K.** See Kreisinger, H., and Ovitz, F. K.
- Paglini, O., and Silbermann, B.** Estimation of thiophen in benzene, 102.
- Palitzsch, S.** Use of solutions of borax and boric acid in the colorimetric estimation of the concentration of hydrogen ions in sea-water, 387.
- Palmer, L. S., and Thrun, W. E.** Detection of natural and artificial pigments in oleomargarine and butter, 278.
- Pappel, A., and Hogan, G.** Composition of Egyptian buffalo milk, 307.
- Partridge, W.** See Moor, C. G., and Partridge, W.
- Passerini, N.** Valuation of nitrogenous compounds in feeding-stuffs, 378.
- Pellet, H.** Estimation of lead as lead sulphite, 257.
- Pellet, H.** Yeast preparation for use in the estimation of crystallisable sugar by inversion, 381.
- Pertusi, C.** Action of magnesium on the sulphides of tin, antimony, and arsenic, 19.
- Pettijohn, E.** See Sidener, C. F., and Pettijohn, E.
- Pfeffer, O.** Precipitation of cholesterol and phytosterol by digitonin, 317.
- Phillips, S. B.** A rapid method for the estimation of fat in powders, 122.
- Pierlot, —.** Analysis of saffron, 278.
- Pinnow, J.** Distribution co-efficients and velocity of extraction of certain organic acids, 80.
- Pinnow, J.** See Wolfrum, L., and Pinnow, J.
- Pisani, F.** New method of estimating fluorine, 218.
- Piva, A.** Direct estimation of carbon monoxide in mixtures containing unsaturated hydrocarbons, 141.
- Plaisance, G. P., and Moses, D. V.** Simple device for regulating pump used in exhausting a vacuum oven, 263.
- Plaisance, G. P.** See Dox, A. W., and Plaisance, G. P.
- Plimmer, R. H. A.** Analysis of proteins. I.: Estimation of Arginine by decomposition with alkali, 285.
- Plimmer, R. H. A.** Practical Organic and Bio-Chemistry (Review), 118.
- Pontio, —.** Analysis of textiles, 81.
- Popa, D. E.** Estimation of iodine and bromine in saline waters, 184.
- Popp, M.** Estimation of citrate-soluble phosphoric acid in basic slag by the iron citrate method, 186.
- Porter, H. C., and Ralston, O. C.** Some properties of the water in coal, 314.
- Potter, R. S., and Snyder, R. S.** Amino-Acid nitrogen of soil, 48.
- Potter, R. S., and Snyder, R. S.** Estimation of nitrates in soil, 20.
- Powell, A. R.** See Schoeller, W. R., and Powell, A. R.
- Prescott, J. A.** See Davis, W. A., and Prescott, J. A.
- Pritchard, F. P.** See Reeve, C. S., and Pritchard, F. P.
- Puxeddu, E.** Reducing action of phenylhydrazine on certain metallic oxides, 101.

- Rakshit, Jitendranath.** Estimation of acetone in presence of ethyl alcohol, 245.
- Rakuzin, M. A., and Braudo, E. M.** Adsorption of aqueous solutions of pepsin by alumina, 79.
- Ralston, O. C.** See Porter, H. C., and Ralston, O. C.
- Randall, E. L.** Estimation of Prussian blue in spent oxide, 142.
- Randall, E. L.** See Knapman, F. G. W., and Randall, E. L.
- Rasmussen, H. B.** Estimation of nicotine in tobacco and tobacco extracts. A critical examination of methods, 208.
- Reckleben, H.** Estimation of phosphorus hydride, 55.
- Redfern, E. L.** Analysis of non-alcoholic lemon and orange extracts, 206.
- Reed, J. C.** See Holland, E. B., Reed, J. C., and Buckley, J. P.
- Reed, J. C.** See Holland, E. B., Reed, J. C., and Buckley, J. P., Junr.
- Reeve, C. S., and Pritchard, F. P.** New penetration needle for use in testing bituminous materials, 190.
- Reif, G.** Estimation of methyl alcohol in ethyl alcohol, 100.
- Reutter, L.** Composition of embalming agents used by the Incas, 203.
- Reutter, L.** Composition of Roman pomade, 171.
- Richards, P. A. E.** Ancient Irish oak, 303.
- Richards, P. A. E.** Note on a specimen of ancient Russian oak, 169.
- Richardson, C.** "Formolite" reaction of Nastukoff as applied to oil residuals and natural asphalts, 212.
- Richardson, F. W., and Bracewell, G. A.** Analysis of waxes, with special reference to beeswax and wool-wax, 89.
- Richter, V. von.** Organic Chemistry, or the Chemistry of the Carbon Compounds (Review), 193.
- Riffe, J.** See Anderson, R. P., and Riffe, J.
- Ring, C. H.** See Army, H. V., and Ring, C. H.
- Roark, R. C., and MacDonnell, C. C.** Reduction of arsenic to the arsenious state by cuprous chloride and estimation of arsenic by distillation as trichloride, 217.
- Roberts, C. C.** Zeiss Butyro-Refractometer: The conversion of scale-readings to refractive indices, 376.
- Robertson, G. S.** Solubility of mineral phosphates in citric acid solution, 148.
- Robertson, P. W.** Simultaneous estimation of carbon and halogen by the chromic acid method, 140.
- Robinson, W. O.** Comparison of methods for estimation of phosphates in soils, 187.
- Roche, J. W.** See Francis, F., Geake, F. H., and Roche, J. W.
- Rocques, X.** Estimation of essential oils (essences) in liqueurs, 306.
- Rocques, X.** Estimation of essential oils in vermouth, 89.
- Rodt, V.** Determination of very small quantities of water in alcohol by means of the critical solution temperature, 316.
- Rogerson, H.** Action of normal and basic lead acetate on the sugars, with remarks on Rübner's Test for dextrose and lactose, 102.
- Ronnet, L.** Estimation of essential oils (essences) in vermouth, 306.
- Rosanoff, M. A.** See Drogin, I., and Rosanoff, M. A.
- Rosenberg, L., and Lenher, V.** Analysis of soap powders, 310.
- Rosenheim, M. C.** Colour Reaction for "oxycholesterol," 284.
- Russell, E. J.** See Hall, A. D., Armstrong, E. F., Armstrong, H. E., Keeble, E., and Russell, E. J.
- Russell, G. A.** Resins in hops from various geographic localities, 47.
- Russell, G. A.** Volatile oil of *Euthamia Caroliniana* (L.) Greene, 281.
- Rutley, F.** Elements of Mineralogy (Review), 327.
- Sachs, J. H.** Comparison of the permanganate methods for the estimation of required oxygen in water analysis, 221.

- Sadtler, S. S.** Lutes and cements, 262.
- Saillard, E.** Action of cupric solutions on cane sugar. Estimation of invert sugar in presence of cane sugar, 51.
- Salamon, M. S.** Sampling and analysis of beeswax, 76.
- Salkowski, E.** Behaviour of metals towards certain acids containing hydrogen peroxide, 257.
- Salter, R. M.** Rapid method for accurate determination of total carbon in soils, 282.
- Salvadori, R.** Detection of cadmium, 147.
- Salvadori, R.** Use of ammonium nitrate in estimating the calorific power of lignites, 344.
- Sammert, C. F.** New Colorimeter, 261.
- Sander, A.** Titration of thiosulphates in the presence of sulphides and the estimation of thiosulphates in the presence of sulphites, bisulphites, and sulphides, 85.
- Sander, A.** Volumetric estimation of thiosulphate in the presence of sulphite, 320.
- Savill, C. A., and Cox, A. W.** Viscosity of oils in the Redwood and Ostwald Viscometers, 112.
- Sawyer, G. B.** See Seaton, M. Y., and Sawyer, G. B.
- Sawyer, G. C.** See Davis, W. A., and Sawyer, G. C.
- Sawyer, G. C.** See also Davis, W. A., Daish, A. J., and Sawyer, G. C.
- Scalione, C. C.** Volatile oil of *Calycanthus Occidentalis*, 309.
- Scatchard, G.** See Bogert, M. T., and Scatchard, G.
- Scelba, M.** See Carlinfanti, C., and Scelba, M.
- Scherpenberg, A. L. Van.** Seed kernels of *Pseudo-phœnix Vinifera Bccari*, 282.
- Schick, P., and Hatos, G.** Methyl red as an indicator in the estimation of nicotine by Toth's Method, 308.
- Schlesinger, H. I.** See Bingham, E. C., Schlesinger, H. I., and Coleman, A. B.
- Schmidt, C. L. A.** Large fat extractor, 189.
- Schoch, E., and Crawford, F. M.** Electrolytic estimation of silver in solutions of silver chloride in ammonia, 350.
- Schoeller, W. R., and Powell, A. R.** On the alkalimetric estimation of certain divalent metals in the form of tertiary phosphates, with especial reference to the volumetric determination of cobalt and nickel, 124.
- Scholes, S. R.** Note on the identification of trivalent manganese in glass, 54.
- Scholta, K.** See Klostermann, M!, and Scholta, K.
- Schorger, A. W.** Oils of the *Conifere*. V.: The leaf and twig and bark oils of Incense Cedar, 177.
- Seaton, M. Y., and Sawyer, G. B.** Varnish analysis. I.: Molecular weights of vegetable oils, 254.
- Selch, E.** Ignition of ferric oxide in the gravimetric estimation of iron, 54.
- Selecter, I.** Apparatus for fat extraction, 22.
- Shiple, J. W.** Sodium pyrogallate as reagent for estimation of oxygen, 349.
- Shorter, S. A.** Researches on the detergent action of soap, 171.
- Sidener, C. F., and Pettijohn, E.** Estimation of aluminium, 318.
- Silbermann, B.** See Paglini, O., and Silbermann, B.
- Sindall, R. W., and Bacon, W.** Methods of analysing vegetable parchments, 101.
- Singh, Arjan.** See Barnes, J. H., and Singh, Arjan.
- Singh, P., and Ghose, T. P.** Use of nickel hydroxide in tannin estimation, 102.
- Sinkinson, E.** Washing precipitates by mechanical means, 390.
- Sircar, A. C.** Method of estimating the amount of seasoning of teak wood, 213.
- Slater, M. E.** See Grindley, H. S., and Slater, M. E.
- Smith, H. L.** Note on the melting-point of salicylic acid, and a test for the presence para-hydroxybenzoic acid, 3.
- Smith, W.** Estimation of selenium in sulphur, 21.
- Snell, J. F.** Analysis of maple products (V.), 207; (VII.), 306.

- Snell, J. F., and Zoeren, G. J. Van.** Analysis of Maple products. VIII.: Application of the conductivity and volumetric basic lead tests to maple sugar, 208.
- Snell, J. F., MacFarlane, N. C., and Van Zoeren, G. J.** Analysis of maple products. VI.: Volumetric basic lead acetate test for purity of maple syrups, 207.
- Snyder, R. S.** See Potter, R. S., and Snyder, R. S.
- Spica, C. L.** Estimation of the degree of bolting of flour, 305.
- Spielmann, P. E., and Jones, F. B.** Analysis of benzol first-runings, 344.
- Spielmann, P. E., and Wheeler, E. G.** Analysis of commercial benzols, 174.
- Spiro, K.** New reaction of hydrogen peroxide, 54.
- Stacy, C. E.** New colour reaction for aloes, 75.
- Stein, M. F.** Water Purification Plants and their Operation (Review), 158.
- Storch, H.** See Bichowsky, F. R. von, and Storch, H.
- Storm, C. G.** Analysis of explosives permitted in America, 346.
- Street, J. P., and Bailey, E. M.** Carbohydrates and enzymes of the Soya bean, 9.
- Stüber, W.** See Fendler, G., and Stüber, W.
- Stuttlefield, B. M.** See Davisson, B. S., Allen, E. R., and Stuttlefield, B. M.
- Sugiura, K.** See Falk, K. G., and Sugiura, K.
- Swanson, A. A., and Hulett, G. A.** Estimation of gases dissolved in waters and effluents, 17.
- Swen, O.** Method of mechanical soil analysis, 23.
- Szeberényi, P.** Estimation of alcohol in ether, 50.
- Tamaru, S.** Calorimetric measurements at high temperatures, 110.
- Taylor, M. G. D.** See Cranfield, H. T., and Taylor, M. G. D.
- Thaysen, A. C.** See Burri, R., and Thaysen, A. C.
- Thole, F. B.** See Dunstan, A. E., and Thole, F. B.
- Thom, C., and Ayers, S. H.** Effect of pasteurisation on mould spores, 210.
- Thompson, H. L.** Analysis of Spirit of peppermint, 277.
- Thornton, Junr., W. M.** The separation of thorium from iron with the aid of the ammonium salt of nitrosophenylhydroxylamine ("Cupferron"), 288.
- Thrun, W. E.** See Palmer, L. S., and Thrun, W. E.
- Tilgner, M.** Estimation of total hardness (in waters) by potassium palmitate, 351.
- Tingle, A.** Detection of nitrates in the presence of organic matter, 107.
- Tingle, A.** See Tingle, J. B., and Tingle, A.
- Tingle, J. B., and Tingle, A.** Rapid method for converting scrap platinum into chloroplatinic acid, 109.
- Tognoli, E.** Reattivi e Reazioni (Review), 356.
- Tónius, W.** Preparation of diphenylaminesulphuric acid reagent, 314.
- Torossian, G.** Rapid approximate assay for lead, 219.
- Torug, E.** Methods for the estimation of carbon dioxide. New form of absorption tower adapted to the titrimetric method, 58.
- Truninger, E.** Analysis of crude calcium cyanamide, 383.
- Torug, E.** Methods for the estimation of carbon dioxide. New form of absorption tower adapted to the titrimetric method, 58.
- Tsakalotos, D. E.** Physical and chemical characters for the identification of aspirin, 340.
- Tsujimoto, M.** Highly unsaturated hydrocarbon in shark liver oil, 385.
- Tsujimoto, M.** Hydrogenated Chrysalis Oil, 345.
- Tunmann, O.** Analysis of Rhamnus barks, 379.
- Turner, B. B.** Chemical composition of *Oscillaria prolifica*, 280.
- Turner, W. A.** Estimation of vanadium by cupferron, 261.
- Tuttle, J. B.** Estimation of barium carbonate and barium sulphate in vulcanised rubber goods, 215.
- Tuttle, J. B.** See Waters, C. E., and Tuttle, J. B.

- Uchida, S.** Some Japanese essential oils, 88.
- Van Scherpenberg, A. L.** Seed kernels of *Pseudo-phoenix Vinifera Beccari*, 282.
- Van Zoeren, G. J.** New dip electrode, 153.
- Van Zoeren, G. J.** See Snell, J. F., and Van Zoeren, G. J.
- Van Zoeren, G. J.** See also Snell, J. F., MacFarlane, N. C., and Van Zoeren, G. J.
- Vanino, L.** Borax and metallic borates, 52.
- Vanino, L., and Hartwagner, F.** Iodimetric estimation of gold, 319.
- Vaubel, W., and Knocke, A.** Behaviour of antimony stains or deposits towards hypochlorite solution, 147.
- Vollersten, J. J.** See Lowenstein, A., and Vollersten, J. J.
- Waddell, J.** The volumetric estimation of lead, 270.
- Wagemann, K.** Estimation of nickel with dimethylglyoxime, 83.
- Wallis, T. E.** Quantitative Microscopy, 357.
- Walpole, G. S.** Collodion membranes for ultrafiltration and pressure dialysis, 152.
- Walpole, G. S.** See Glenny, A. T., and Walpole, G. S.
- Ware, E. E.** Optical dispersion of Chinese wood oil as an index of purity, 176.
- Warneford, F. H. S.** See Harding, V. J., and Warneford, F. H. S.
- Wasicky, R.** Sensitive colour reaction for atropine, hyoscyamine, and scopolamine, 45.
- Wasicky, R., and Wimmer, C.** Estimation of shell in ground cocoa, 46.
- Wastenson, H.** Estimation of silver in protein preparations, 349.
- Waters, C. E., and Tuttle, J. B.** Qualitative tests for gum arabic and its quantitative estimation, 205.
- Watt, H. E., and Angus, G. B.** Fat of *Nux Vomica*, 135.
- Weaver, E. K.** Colorimetric estimation of acetylene, 97.
- Weber, H. C. P.** See Welch, J. M., and Weber, H. C. P.
- Webster, J.** Excretion and secretion of salvarsan and neo-salvarsan, 231.
- Weinziel, J.** Simple test for *Bacillus sporogenes* in milk and water, 48.
- Welch, J. M., and Weber, H. C. P.** Separation of Metals of the Tin Group in Qualitative Analysis, 258.
- Welwart, N.** Estimation of tin in tin ashes, 259.
- West, R. M.** Estimation of moisture in syrups by the calcium carbide method, 186.
- Wheeler, E. G.** See Spielmann, P. E., and Wheeler, E. G.
- White, B. S.** Colorimetric method for the determination of copper and iron in pig lead, lead oxides, and lead carbonate, 53.
- Whiton, L. C.** Estimation of benzol in coke-oven gas by Burrell's Vapour Apparatus, 313.
- Wickenden, L., and Hassler, J. W.** Rapid method for comparing the decolorising efficiency of charcoals, 256.
- Willand, P. S., and James, C.** Separation of erbium from yttrium, 257.
- Willows, R. S., and Hatschek, E.** Surface tension and surface energy and their influence on chemical phenomena (Review), 120.
- Wilson, E. G., and Atkins, W. R. G.** Estimation of reducing sugars by Kendall's Solution, and the construction of a table indicating the reducing power of laevulose, 285.
- Wimmer, C.** See Wasicky, R., and Wimmer, C.
- Winge, O.** Estimation of moisture and bitter principles in hops, 6.
- Winkler, L. W.** Estimation of bromine and iodine in the presence of chlorides, 104.
- Winkler, L. W.** Water analysis, 151.
- Winter, O. B.** Modification of McCrudden's Method for calcium, for estimation of calcium and strontium in presence of phosphoric acid and a small amount of iron, 287.

- Winton, A. L.** Microscopy of Vegetable Foods (Review), 393.
Withey, W. H. Analysis of aluminium and its alloys, 181.
Wolfrum, L., and Pinnow, J. Ester acids of lemon juice, 305.
Woodman, A. G. Food analysis. Typical methods and interpretation of results (Review), 228.
Wright, A. M. Composition and nutritive value of mutton and lamb, 134.
Wright, C. H. Determination of the specific gravity of fixed oils in the tropics, 213
Wuyts, L. Analysis of mixed and spent acids, 103.
- Zay, C.** See Liberi, G., Cusmane, A., Marsiglia, T., and Zay, C.
Zlatároff, A. Composition of the fruit of *Cicer Arietinum L.* (Chick Pea), 304.
Zoeren, G. J. Van. New dip electrode, 153.
Zoeren, G. J. Van. See Snell, J. F., and Zoeren, G. J. Van.
Zoeren, G. J. Van. See also Snell, J. F., MacFarlane, N. C., and Zoeren, G. J. Van.
Zschiegner, H. Accurate end-point in volumetric estimation of sulphur in steel, 220.

INDEX OF SUBJECTS.

- Absorption Tower:** Carbon dioxide; Methods for the estimation of. New form of — adapted to the titrimetric method. E. Torug, 58.
- Abstracts of Papers Published in Other Journals:** 6, 45, 76, 88, 132, 171, 203, 247, 273, 304, 340, and 377.
- Acetal:** Paracetaldehyde and —; Estimation of mixtures of. K. J. P. Orton and P. V. McKie, 143.
- Acetone:** Ethylalcohol; Estimation of — in presence of. Jitendranath Rakshit, 245.
- Acetone:** Frommer's Test; Detection of — by. N. O. Engfeldt, 80.
- Acetylene:** Colorimetric estimation of —. E. K. Weaver, 97.
- Acid Calcium Bisulphite Solutions:** Analysis of —. E. Hägglund, 256.
- Acid Ratio:** Germinated grain in technical analysis; New method of determining the proteolytic strength of: —. C. A. Nowak, 10.
- Acidimetry:** Hydrogen ion concentration; Sensitive indicator for — and alkalimetry and for determination of. M. T. Bogert and G. Scatchard, 315.
- Acids:** Hydrogen peroxide; Behaviour of metals towards certain — containing. E. Salkowski, 257.
- Address:** Retiring President; Annual — of the. 31.
- Adiabatic Calorimeter:** —; An. F. Danills, 320.
- Adrenaline:** Alkaloids containing a phenolic group (morphine, cupreine, —, etc.); General reaction of. G. Denigès, 343.
- Aeration:** Kjeldahl Method for the estimation of nitrogen; Comparative study of — and heat distillation in the. K. G. Falk and K. Sugiura, 186.
- Aeration Method:** Ammonia; — for. B. S. Davisson, E. R. Allen, and B. M. Stuttlefield, 386.
- Agglutination Test:** *Bacterium abortus* in milk; — as a means of studying the presence of. L. H. Cooledge, 91.
- Air:** —, water-vapour, and nitrous oxide in mixtures of these three constituents; Estimation of. G. A. Burrell and G. W. Jones, 318.
- Air:** Carbon dioxide in — by Haldane's Apparatus; Estimation of. R. C. Frederick, 105.
- Albumin:** Urine; Estimation of — in. R. Dhommée, 173.
- Alcohol:** Ether; Estimation of — in. P. Szeberényi, 50.
- Alcohol:** Ether; Estimation of small amounts of — and water in. E. Malinckrodt and A. D. Alt, 342.
- Alcohol:** Ethyl —; Estimation of acetone in presence of. Jitendranath Rakshit, 245.
- Alcohol:** Ethyl —; Estimation of methyl — in. G. Reif, 100.
- Alcohol:** Methyl — in Ethyl —; Estimation of. G. Reif, 100.
- Alcohol:** Methyl —; Rinck's Method for the detection of. G. Fendler, 316.
- Alcohol:** Phenol; Estimation of — in the presence of. J. Ehrlich, 212.
- Alcohol:** Spirit varnishes; Estimation of methyl and ethyl — in. G. W. Knight and C. T. Lincoln, 14.
- Alcohol:** Water in — by means of the critical solution temperature; Determination of very small quantities of. V. Rodt, 316.
- Alcohol:** Zingiberol: A new sesquiterpene — occurring in essential oil of ginger. B. J. Brooks, 90.

- Aldehydes:** Reaction of —; New. R. de Fazi, 250.
- Alkali:** Proteins; Analysis of. I.: Estimation of arginine by decomposition with —. R. H. A. Plimmer, 285.
- Alkali:** Soap; Estimation of free — in. F. H. Newington, 88.
- Alkali Sulphides:** Mixture of —, thiosulphates, and dithionates; Analysis of a. J. A. Muller, 104.
- Alkalimetric Estimation:** Certain divalent metals in the form of tertiary phosphates; On the — of, with especial reference to the volumetric determination of cobalt and nickel. W. R. Schoeller and A. R. Powell, 124.
- Alkalimetry:** Acidimetry and — and for determination of hydrogen ion concentration; Sensitive indicator for. M. T. Bogert and G. Scatchard, 315.
- Alkaloids:** Phenolic group (morphine, cupreine, adrenaline. etc.); General reaction of — containing a. G. Denigès, 343.
- Alkaline Copper Solutions:** Cane sugar and invert sugar on —; Comparative actions of. L. Maquenne, 178.
- Alkaline Copper Solutions:** Cane sugar on —; Action of. L. Maquenne, 12.
- Alkaline Pyrogallol:** Gas analysis; Reagents for use in. III.: Specific absorption of — in various pipettes. R. P. Anderson, 183.
- Alkaline Pyrogallol:** Pipettes especially adapted for use with — R. P. Anderson, 190.
- Alkaloids:** Cinchona bark; Rapid and exact method of estimating — in. E. Lenzi, 78.
- Alkaloids:** Hydrochloride Method; Estimation of — by the. G. D. Beal and E. Brady, 132.
- Alkaloids:** Small quantities of —; Estimation of. C. Carlinfanti and M. Scelba, 273.
- Alkaloids:** Small quantities of —; Estimation of. E. Carlinfanti, 273.
- Alloys:** Aluminium and its —; Analysis of. W. H. Withey, 181.
- Alloys:** Copper-aluminium-zinc —; Analysis of. H. Graefe, 106.
- Aloes:** Colour reaction for —; A new. C. E. Stacey, 75.
- Alumina:** Pepsin by —; Adsorption of aqueous solutions of. M. A. Rakuzin and E. M. Braudo, 79.
- Aluminium:** Alloys; Analysis of — and its. W. H. Withey, 181.
- Aluminium and Ferric Hydroxides:** Ammonium chloride upon — during ignition; Effect of. H. W. Daudt, 16.
- Aluminium:** Estimation of —. C. F. Sidener and E. Pettijohn, 318.
- Aluminium:** Oxide; Estimation of — as. W. Blum, 286.
- America:** Explosives permitted in —; Analysis of. C. G. Storm, 346.
- American Palms:** Oil-seeds derived from —; Some new. G. T. Bray and F. L. Elliott, 298.
- Amino-Acid Nitrogen:** Soil; — of. R. S. Potter and R. S. Snyder, 48.
- Amino-Acids:** Ninhydrin reaction with — and ammonium salts. V. J. Harding and F. H. S. Warneford, 283.
- Amino-Acids:** Van Slyke Method; Estimation of the — of feeding-stuffs by the. H. S. Grindley and M. E. Slater, 46.
- Ammonia:** Aeration method for —. B. S. Davisson, E. R. Allen, and B. M. Stuttlefield, 386.
- Ammonia:** Naphthalene in —; Solubility of. S. Hilpert, 142.
- Ammonia:** Silver in solutions of silver chloride in —; Electrolytic Estimation of. E. P. Schoch and F. M. Crawford, 350.
- Ammonium Carbonate:** Magnesium salts by —; Precipitation of. F. Fichter and R. Osterwalder, 319.
- Ammonium Chloride:** Ferric and aluminium hydroxides during ignition; Effect of — upon. H. W. Daudt, 16.

- Ammonium Fluoride:** Phosphoric acid during fusion with —; Loss of. W. A. Davis and J. A. Prescott, 388.
- Ammonium Nitrate:** Lignites; Use of — in estimating the calorific power of. R. Salvadori, 344.
- Ammonium Salt:** Thorium from iron with the aid of the — of nitrosophenylhydroxylamine ("Cupferron"); The separation of. W. M. Thornton, Junr., 288.
- Ammonium Salts:** Amino-acids and —; Ninhydrin reaction with. V. J. Harding and F. H. S. Warneford, 283.
- Analysis:** Fat —; Improved methods for. E. B. Holland, J. C. Reed, and J. P. Buckley, 252.
- Analysis:** Titanium trichloride in volumetric —; Use of. A. Monnier, 260.
- Analysis:** Varnish —. I.: Molecular weights of vegetable oils. M. Y. Seaton and G. B. Sawyer, 254.
- Analytical Standard:** Potassium dichromate as an —. G. Bruhns, 347.
- Aniline Perchlorate:** Potassium and sodium by the use of —; Separation of, and the subsequent estimation of the sodium. D. V. Hill, 55.
- Animal Fats and Oils:** Flash and fire points of —; Effect of free fatty acids upon the. A. Lowenstein and J. J. Vollersten, 14.
- Animal Foodstuffs:** Benzoic acid in —; Estimation of. K. Baumann and J. Grossfeld, 76.
- Antigens:** Diphtheria and tetanus toxins; Detection and concentration of — by ultrafiltration, pressure dialysis, etc., with special reference to. A. T. Glenny and G. S. Walpole, 137.
- Antimony:** Heavy metals from tin, —, tungsten, and molybdenum by means of the electric current; Use of hydrofluoric acid in separation of some. L. W. McCay and N. H. Furman, 149.
- Antimony Stains:** Hypochlorite solution; Behaviour of — or deposits towards. W. Vaubel and A. Knocke, 147.
- Antimony Sulphide Pigments:** Free sulphur in —; Estimation of. A. Hutin, 109.
- Antimony:** Sulphides of tin, —, and arsenic; Action of magnesium on the. C. Pertusi, 19.
- Apparatus, etc., Abstracts:** 22, 57, 85, 110, 152, 188, 222, 261, 291, 320, 352, and 390.
- Approximate Assay:** Lead; Rapid — for. G. Torossian, 219.
- Aqueous Solutions:** Pepsin by alumina; Adsorption of — of. M. A. Rakuzin and E. M. Braudo, 79.
- Arachidic Acid:** Detection of —. R. H. Kerr, 381.
- Arginine:** Proteins; Analysis of. I.: Estimation of — by decomposition with alkali. R. H. A. Plimmer, 285.
- Arsenate Test:** Arsenic; Study of the silver — for. L. J. Curtman and P. Daschavsky, 286.
- Arsenic:** Arsenious state by cuprous chloride and estimation of — by distillation as trichloride; Reduction of — to the. R. C. Roark and C. C. MacDonnell, 217.
- Arsenic:** Platinum, —, gold, selenium, tellurium and molybdenum; Qualitative detection and separation of. P. E. Browning, 84.
- Arsenic:** Selenium; Detection of small quantities of, and its distinction from —. J. Meunier, 389.
- Arsenic:** Silver arsenate test for —; Study of the. L. J. Curtman and P. Daschavsky, 286.
- Arsenic:** Sulphides of tin, antimony, and —; Action of magnesium on the. C. Pertusi, 19.

- Arsenious State:** Arsenic to the — by cuprous chloride; Reduction of, and estimation of arsenic by distillation as trichloride. R. C. Roark and C. C. MacDonnell, 217.
- Artificial Colours:** Wines; Detection of — in. H. Kreis, 380.
- Ash:** Coal — under fuel-bed conditions; Method and furnace for the determination of the softening temperature of. A. C. Fieldner and A. L. Field, 16.
- Ashes:** Tin in tin —; Estimation of. N. Welwart, 259.
- Asphalts:** Oil residuals and natural —; "Formolite" reaction of Nastukoff as applied to. C. Richardson, 212.
- Aspirin:** Identification of —; Physical and chemical characters for the. D. E. Tsakalotos, 340.
- Atmospheric Pollution:** Investigation of —; Committee for the. First Report: April, 1914, to March, 1915, 113.
- Atomic Weights:** International —. 1916, 1.
- Atropine:** Colour reaction for —, hyoseyamine, and scopolamine; Sensitive. R. Wasicky, 45.
- Automatic:** Pipette. A. Lowy, 321.
- Automatic:** Vacuum pump. O. Maass, 59.
- Bacillus Sporogenes:* Milk and Water; Simple test for — in. J. Weinziel, 48.
- Bacteria:** Heat; Resistance of non-sporing — in milk to the action of. C. Gorini, 381
- Bacteria:** Milk; Rapid method of counting — in. W. D. Frost, 48.
- Bacteriological, Physiological, etc., Abstracts:** 9, 48, 91, 137, 172, 210, 248, 280, 312, and 380.
- Bacterium Abortus:* Milk; Agglutination Test as a means of studying the presence of — in. L. H. Cooledge, 91.
- Baking qualities:** Wheat-flour; Method for the determination of the strength and — of. C. H. Bailey, 134.
- Baking Strength:** Proteins of wheat flour and their relations to — M. J. Blish, 210.
- Banana Stalks:** Potash in — and skins. R. H. Ellis, 211.
- Barbituric Acid:** Furfural; Comparison of —, thiobarbituric acid, and malonyl-guanidine as quantitative precipitants for. W. Dox and G. P. Plaisance, 384.
- Barium Carbonate:** Vulcanised rubber goods; Estimation of — and barium sulphate in. J. B. Tuttle, 215.
- Barium Sulphate:** Rubber goods; Estimation of barium carbonate and — in vulcanised. J. B. Tuttle, 215.
- Bark:** Alkaloids in cinchona —; Rapid and exact method of estimating. E. Lenzi, 78.
- Bark Oils:** *Coniferae*; Oils of the. V.: The leaf and twig and — of Incense Cedar. A. W. Schorger, 177.
- Barks:** Rhamnus —; Analysis of. O. Tunmann, 379.
- Basic Lead Acetate:** Carbohydrates; Estimation of —. V.: The supposed precipitation of reducing sugars by —. W. A. Davis, 382.
- Basic Lead Acetate:** Sugars, with remarks on Rübner's Test for dextrose and lactose; Action of normal and — on the. H. Rogerson, 102.
- Basic Lead Acetate Test:** Maple products; Analysis of. VI.: Volumetric — for purity of maple syrups. J. F. Snell, N. C. MacFarlane, and G. J. van Zoeren, 207.
- Basic Lead Acetate Tests:** Maple products; Analysis of. VIII.: Application of the conductivity and volumetric — to maple sugar. J. F. Snell and G. J. van Zoeren, 208.
- Basic Slag:** Citrate-soluble phosphoric acid in — by the iron citrate method; Estimation of. M. Popp, 186.

- Basic Slag:** Fluorspar on the solubility of — in citric acid solutions; Influence of. G. S. Robertson, 148.
- Bean:** Soya —; Carbohydrates and Enzymes of the. J. P. Street and E. M. Bailey, 9.
- Beans:** Hydrocyanic acid in —; Detection and estimation of. L. Guignard, 380.
- Beans:** Soya —; Presence of urease in. T. M. Groll, 140.
- Beans:** Soya —; Salicylic acid reaction of. H. C. Brill, 381.
- Beeswax:** Philippine —. H. C. Brill and F. Agcaoli, 341.
- Beeswax:** Sampling and analysis of —. M. S. Salamon, 76.
- Beeswax:** Waxes, with special reference to — and wool-wax; Analysis of. F. W. Richardson and G. A. Bracewell, 89.
- Bengal Rose:** Erythrosin and —; Differentiation and valuation of. A. Leys, 99.
- Benzene:** Commercial mixtures; The estimation of — and toluene in. A. Edwards, 250.
- Benzene:** Thiophen in —; Estimation of. O. Paglini and B. Silbermann, 102.
- Benzene:** Toluene; Estimation of: Application of the method to — and xylene. H. W. James, 144.
- Benzoic Acid:** Animal foodstuffs; Estimation of — in. K. Baumann and J. Grossfeld, 76.
- Benzoic Acid:** Mohler's Reaction for —; Modification of. J. Grossfeld, 97.
- Benzol:** Coke-oven gas by Burrell's Vapour Apparatus; Estimation of — in. L. C. Whiton, 313.
- Benzol:** First-runnings; Analysis of —. P. E. Spielmann and F. B. Jones, 344.
- Benzols:** Commercial —; Analysis of. P. E. Spielmann and E. G. Wheeler, 174.
- Benzoyldihydrromethylketol Hydrazine:** —. A new reagent for galactose. J. von Braun, 385.
- Biorisation:** Milk; Comparative experiments on the Pasteurisation and — of. R. Burri and A. C. Thaysen, 10.
- Bismuth β -Naphthol:** Bismuth in —; Electrolytic determination of. B. L. Murray, 204.
- Bisulphites:** Sulphites, —, and sulphides; Titration of thiosulphates in the presence of sulphides and the estimation of thiosulphates in the presence of. A. Sander, 84.
- Bituminous Materials:** Testing —; New penetration needle for use in. C. S. Reeve and P. Pritchard, 190.
- Bitter Principles:** Hops; Estimation of moisture and — in. O. Winge, 6.
- Blood:** Glyoxalase in —; Quantitative estimations of. H. W. Dudley, 91.
- Blood:** Hæmin test for —; Improved. W. Beam and G. A. Freak, 92.
- Bolting:** Flour; Estimation of the degree of — of. C. L. Spica, 305.
- Bomb Furnace:** Electrically-Heated —. D. F. Calhane and H. A. Lavene, 112.
- Borates:** Borax and metallic —. L. Vanino, 52.
- Borax:** Hydrogen ions in sea-water; Use of solutions of — and boric acid in the colorimetric estimation of the concentration of. S. Palitzsch, 387.
- Borax:** Metallic borates; — and. L. Vanino, 52.
- Boric Acid:** Hydrogen ions in sea-water; Use of solutions of borax and — in the colorimetric estimation of the concentration of. S. Palitzsch, 387.
- Boric Acid:** Law Report. — in cream. Haigh *v.* Aerated Bread Company, Limited, 156.
- Borneo Tallow:** Illipé Nuts and the sources of —. 7.
- Boron:** Plants; —: Its absorption and distribution in, and its effect on growth. F. C. Cook, 137.
- Boswellia Serrata:** Resin of —; Turpentine oil and. 8.
- Bottle:** Gas-washing —; Improved form of. F. R. von Bichowsky and H. Storch, 57.

- Bread.** Digestibility of —. I.: Salivary digestion *in vitro*. J. C. Blake, 248.
- Bromates:** Differential Iodimetry. Estimation of periodates, iodates, —, and chlorates in presence of each other. O. L. Barnebey, 106.
- Bromination:** Fats and oils; Heat of — of. J. W. Marden, 176.
- Bromine:** Chlorides; Estimation of — and iodine in the presence of. L. W. Winkler, 104.
- Bromine:** Iodine and — in saline waters; Estimation of. D. E. Popa, 184.
- Buffalo Milk:** Egyptian —; Composition of. A. Pappel and G. Hogan, 307.
- Buffalo Milk:** Egyptian —; Fat of. G. Hogan and E. Griffiths-Jones, 307.
- Burrell's Vapour Apparatus:** Benzol in coke-oven gas by —; Estimation of. L. C. Whiton, 313.
- Butter:** Cold-storage —; Progressive oxidation of. D. C. Dyer, 377.
- Butter Fat:** Ghee—Indian clarified —: "Poli Oil," a new adulterant of. J. H. Barnes and Arjan Singh, 72.
- Butter Fat:** Stearic acid in —; Estimation of. E. B. Holland, J. C. Reed, and J. P. Buckley, Junr., 209.
- Butter:** Feeding on the composition of —; The effect of: Decorticated ground nut cake and decorticated cotton cake. H. T. Cranfield, 336.
- Butter:** Milk and —; The effect of feeding on the composition of: Dried yeast and decorticated cotton meal. H. T. Cranfield and M. G. D. Taylor, 240.
- Butter:** Oleomargarine and —; Detection of natural and artificial pigments in. L. S. Palmer and W. E. Thrun, 278.
- Butyro-Refractometer:** Zeiss —: The conversion of scale-readings to refractive indices. C. C. Roberts, 376.
- Cadmium:** Detection of —. R. Salvadori, 147.
- Cadmium:** Zinc; Volumetric estimation of — and. H. Enell, 82.
- Caffeine:** Coffee; Estimation of — in. G. Fendler and W. Stüber, 88.
- Calcium Bisulphite Solutions:** Acid —; Analysis of. E. Hägglund, 256.
- Calcium Carbide Method:** Syrups by the —; Estimation of moisture in. R. M. West, 186.
- Calcium Content:** Factors in the coagulation process; Reaction and — of milk as. T. H. Milroy, 95.
- Calcium Cyanamide:** Crude —; Analysis of. E. Truninger, 383.
- Calcium Cyanamide:** Dicyanodiamide in — by Caro's Method; Estimation of. G. Hager and J. Kern, 346.
- Calcium:** Estimation of —. E. Cahen and W. H. Hurtley, 287.
- Calcium:** McCrudden's Method for —; Modification of, for estimation of — and strontium in presence of phosphoric acid and a small amount of iron. O. B. Winter, 287.
- Calcium:** Natural waters; Estimation of — and magnesium in. S. A. Kay and S. H. Newlands, 221.
- Calorific Power:** Lignites; Use of ammonium nitrate in estimating the — of. R. Salvadori, 344.
- Calorimeter:** Adiabatic —; An. F. Danills, 320.
- Calorimeter:** Man; Improved respiration — for use in experiments with. C. F. Langworthy and R. D. Milner, 49.
- Calorimeter:** Metabolic activity of small magnitude; Respiration —, partly automatic, for the study of. C. F. Langworthy and R. D. Milner, 390.
- Calorimetric Measurements:** High temperatures; — at. S. Tamaru, 110.
- Calycanthus Occidentalis:** Volatile oil of —. C. C. Scalone, 309.
- Canadian Vine:** Fruit of the —; Oil from the. S. Fachini and G. Dorta, 309.
- Cane Products:** Reducing sugars in —; Gravimetric estimation of. G. P. Meade and J. B. Harris, 247.

- Cane Sugar:** Alkaline copper solutions; Action of — on. L. Maquenne, 12.
- Cane Sugar:** — and invert sugar on alkaline copper solutions; Comparative actions of. L. Maquenne, 178.
- Cane Sugar:** Condensed Milk; Estimation of — in. G. W. Knight and G. Formaněk, 132.
- Cane Sugar:** Cupric solutions on —; Action of. Estimation of invert sugar in presence of —. E. Saillard, 51.
- Cane Sugar:** Reducing sugars in presence of an excess of —; Estimation of. L. Maquenne, 179.
- Canned Foods:** Tin in —. W. D. Bigelow, 342.
- Carbohydrate:** Analysis; Use of enzymes and special yeasts in —. W. A. Davis, 138.
- Carbohydrates:** Estimation of —. V.: The supposed precipitation of reducing sugars by basic lead acetate. W. A. Davis, 382.
- Carbohydrates:** Plants; Studies of the formation and translocation of — in. I.: The — of the mangold leaf. W. A. Davis, A. J. Daish and G. C. Sawyer, 92.
- Carbohydrates:** Plants; Studies of the formation and translocation of — in. II.: The dextrose-lævulose ratio in the mangold. W. A. Davis, 93.
- Carbohydrates:** Plants; Studies of the formation and translocation of — in. III.: The — of the leaf and leaf-stalks of the potato. W. A. Davis and G. C. Sawyer, 94.
- Carbohydrates:** Soya Bean; — and enzymes of the. J. P. Street and E. M. Bailey, 9.
- Carbon:** Chromic acid method; Simultaneous estimation of — and halogen by the. P. W. Robertson, 140.
- Carbon Dioxide:** Estimation of —; Methods for the. New form of absorption tower adapted to the titrimetric method. E. Torug, 58.
- Carbon Dioxide:** Haldane's Apparatus; Estimation of — in air by. R. C. Frederick, 105.
- Carbon Disulphide:** Micro-Reactions of —. J. Denigès, 12.
- Carbon Monoxide:** Hydrogen and — in gas mixtures; Use of copper oxide for fractionation combustion of. G. A. Burrell and G. G. Oberfell, 183.
- Carbon Monoxide:** Mixtures containing unsaturated hydrocarbons; Direct estimation of — in. A. Piva, 141.
- Carbon:** Organo-mercuric compounds; Simultaneous estimation of —, hydrogen, and mercury in. Grignard and A. Abelmann, 98.
- Carbon:** Soils; Rapid method for accurate determination of total — in. R. M. Salter, 282.
- Carbon:** Steel by Eggertz Method; Estimation of — in. H. Le Chatelier and F. Bogitch, 218.
- Carbon:** Steels and irons by direct combustion in oxygen at high temperatures; Estimation of. J. R. Cain and H. E. Cleaves, 218.
- Carbonic Acid:** Natural waters; Estimation of —, combined and free, in solution, particularly in. J. Johnston, 255.
- Caro's Method:** Dicyanodiamide in calcium cyanamide by —; Estimation of. G. Hager and J. Kern, 346.
- Casein:** Milk; Comparison of methods for the estimation of — in. C. B. Hersey, 203.
- Casein:** Technical applications; — and its. D. Marotta, 383.
- Cats:** Morphine in the various organs when injected into — and rabbits; Quantitative estimation of. A. W. Homberger and J. C. Munch, 342.
- Cedar:** *Conifera*; Oils of the. V.: The leaf and twig and bark oils of Incense — A. W. Schorger, 177.

- Cell:** Hydrogen ion concentration; Simple — for the determination of. J. H. Long, 188.
- Cements:** Lutes and —. S. S. Sadtler, 262.
- Cereals:** Flour of —; Estimation of the amount of offals in the. Heiduschka and Heinich, 133.
- Cerium:** Potassium permanganate; Volumetric estimation of — by means of. V. Lenher and C. C. Meloche, 82.
- Charcoals:** Decolorising efficiency of —; Rapid method for comparing the. L. Wickenden and J. W. Hassler, 256.
- Chemical Composition:** *Oscillaria prolifica*; — of. B. B. Turner, 280.
- Chemical Constants:** Fats; Relationship between the physical and — of. H. J. Backer, 315.
- (Chick Pea):** *Cicer Arietinum L.*, —; Composition of the fruit of. A. Zlatároff, 304.
- Chinese Wood Oil:** Adulteration of —. J. C. Brier, 13.
- Chinese Wood Oil:** Index of purity; Optical Dispersion of — as an. E. E. Ware, 176.
- Chlorates:** Differential Iodimetry. Estimation of periodates, iodates, bromates, and — in presence of each other. O. L. Barnebey, 106.
- Chlorides:** Bromine and iodine in the presence of —; Estimation of. L. W. Winkler, 104.
- Chlorine:** Rain and snow; Nitrogen, —, and sulphates in. B. Artis, 83.
- Chlorine:** Town service waters; Detection of free — in. G. A. Le Roy, 182.
- Chloroplatinic Acid:** Scrap platinum into —; Rapid method for converting. J. B. Tingle and A. Tingle, 109.
- Cholesterol:** Digitonin; Precipitation of — and phytosterol by. O. Pfeffer, 317.
- Chromic Acid Method:** Carbon and halogen by the —; Simultaneous estimation of. P. W. Robertson, 140.
- Chromous Chloride:** Gas analysis; Reagents for use in. II.: —. R. P. Anderson and J. Riffe, 183.
- Chrysalis Oil:** Hydrogenated —. M. Tsujimoto, 345.
- Cicer Arietinum L.*:** Fruit of — (Chick Pea); Composition of the. A. Zlatároff, 304.
- Cigarette Papers:** Some —; Analysis and composition of. S. Jordan, 345.
- Cinchona Bark:** Alkaloids in —; Rapid and exact method of estimating. E. Lenci, 78.
- Cinnamaldehyde:** Cinnamon; Colorimetric determination of — in. T. von Fellenberg, 274.
- Cinnamon:** Cinnamaldehyde in —; Colorimetric determination of. T. von Fellenberg, 274.
- Circulating Pump:** Laboratory —. J. S. Morgan, 23.
- Citrate-Soluble Phosphoric Acid:** Basic slag by the iron citrate method; Estimation of — in. M. Popp, 186.
- Citric Acid:** Milk; Estimation of — in. R. Kunz, 378.
- Citric Acid Solution:** Mineral phosphates in —; Solubility of. G. S. Robertson, 148.
- Citric Acid Solutions:** Basic slag in —; Influence of fluorspar on the solubility of. G. S. Robertson, 148.
- Coagulation Process:** Factors in the —; Reaction and calcium content of milk as. T. H. Milroy, 95.
- Coal Ash:** Softening temperature of — under fuel-bed conditions; Method and furnace for the determination of the. A. C. Fieldner and A. L. Field, 16.
- Coal:** Water in —; Some properties of the. H. C. Porter and O. C. Ralston, 314.

- Cobalt:** Alkalimetric estimation of certain divalent metals in the form of tertiary phosphates, with especial reference to the volumetric determination of — and nickel; On the. W. R. Schoeller and A. R. Powell, 124.
- Cobalt:** Volumetric estimation of —. W. D. Engle and R. G. Gustavson, 386.
- Cobalti-Nitrite Methods:** Potash; Perchlorate and gravimetric — for determination of. T. D. Jarrell, 83.
- Cocoa:** Shell in ground —; Estimation of. R. Wasicky and C. Wimmer, 46.
- Co-efficients:** Organic acids; Distribution — and velocity of extraction of certain. J. Pinnow, 80.
- Coffee:** Caffeine in —; Estimation of. G. Fendler and W. Stüber, 88.
- Coke-Oven Gas:** Benzol in — by Burrell's Vapour Apparatus; Estimation of. L. C. Whiton, 313.
- Cold-Storage Butter:** Oxidation of —; Progressive. D. C. Dyer, 377.
- Collodion Membranes:** Ultrafiltration and pressure dialysis; — for. G. S. Walpole, 152.
- Colorimeter:** New —. C. F. Sammet, 261.
- Colorimetric Assays:** Colour standards for —. H. V. Arny and C. H. Ring, 222.
- Colorimetric Method:** Copper and iron in pig lead, lead oxides, and lead carbonate. B. S. White, 53.
- Colorimetric Method:** Potato starch; — for the detection of. G. Blunck, 312.
- Colorimetric Observations:** Error in —; Possible source of. J. H. Long, 153.
- Colour:** Reaction for aloes; A new —. C. E. Stacey, 75.
- Colour:** Reaction for atropine, hyoscyamine, and scopolamine; Sensitive —. R. Wasicky, 45.
- Colour:** Reaction for "Oxycholesterol." M. C. Rosenheim, 284.
- Colour:** Reaction of croton oil. Comte, 275.
- Colour:** Standards of colorimetric assays. H. V. Arny and C. H. Ring, 222.
- Colours:** Wines; Detection of artificial — in. H. Kreis, 380.
- Combustion:** Carbon in steels and irons by direct — in oxygen at high temperatures; Estimation of. J. R. Cain and H. E. Cleaves, 218.
- Comparative Method:** Vapour densities; — for determining. P. Blackman, 24.
- Compound:** Rubber in a —; Direct estimation of. R. W. Belfit, 215.
- Concentration:** Hydrogen ion —; Simple cell for the determination of. J. H. Long, 188.
- Concentration:** Hydrogen ions in sea-water; Use of solutions of borax and boric acid in the colorimetric estimation of the — of. S. Palitzsch, 387.
- Condensed Milk:** Cane sugar in —; Estimation of. G. W. Knight and G. Formaněk, 132.
- Condensers:** Relative efficiency of laboratory reflux —; Comparison of the. M. V. Dover and J. W. Marden, 352.
- Conductivity and Volumetric Basic Lead Acetate Tests:** Maple products; Analysis of. VIII.: Application of the — to maple sugar. J. F. Snell and G. J. van Zoeren, 208.
- Coniferae:** Oils of the —. V.: The leaf and twig and bark oils of Incense Cedar. A. W. Schorger, 177.
- Constant Boiling-Point Mixtures:** Organic liquids: The application of the method of — to the qualitative analysis of certain mixed. W. R. G. Atkins, 334.
- Constants:** Physical and chemical — of fats; Relationship between the. H. J. Backer, 315.
- Copper-Aluminium-Zinc Alloys:** Analysis of —. H. Graefe, 106.
- Copper:** Commercial — sulphate; Estimation of — in. G. Incze, 53.
- Copper:** Iron; Rapid method for the estimation of — and. G. Edgar, 181.
- Copper Oxide:** Hydrogen and carbon monoxide in gas mixtures; Use of — for fractionation combustion of. G. A. Burrell and G. G. Oberfell, 183.

- Copper:** Pig lead, lead oxides, and lead carbonate; Colorimetric method for the determination of — and iron in. B. S. White, 53.
- Copper Solutions:** Cane sugar on alkaline —; Action of. L. Maquenne, 12.
- Copper Solutions:** Cane sugar and invert sugar on alkaline —; Comparative Actions of. L. Maquenne, 178.
- Copper Sulphate:** Copper in commercial —; Estimation of. G. Incze, 53.
- Copper:** Tomatoes and tomato preserves; Presence of — in. G. Liberi, A. Cusmano, T. Marsiglia, and C. Zay, 379.
- Corn:** Kaffir — (“Dari”) from South Africa. 8.
- Cotton Cake:** Butter; The effect of feeding on the composition of: Decorticated ground nut cake and decorticated —. H. T. Cranfield, 336.
- Cotten Meal:** Milk and butter; The effect of feeding on the composition of. Dried yeast and decorticated —. H. T. Cranfield and M. G. D. Taylor, 240.
- Cow's Milk:** Goat's milk with —; Method for detecting the admixture of. N. A. Brodrick-Pittari, 308.
- Cows:** Law report. Quality of milk. The feeding of —. Hunt v. Richardson. 224.
- Cream:** Fat in —; Estimation of. L. Lindet, 277.
- Cream:** Law Report. Boric acid in —. Haigh v. Aerated Bread Company, Limited, 156.
- Critical Solution Temperature:** Water in alcohol by means of the —; Determination of very small quantities of. V. Rodt, 316.
- Croton Oil:** Colour reaction of —. Comte, 275.
- Crystallisable Sugar:** Inversion; Yeast preparation for use in the estimation of — by. H. Pellet, 381.
- (“Cupferron”):** Ammonium salt of nitrosophenylhydroxylamine —; The separation of thorium from iron with the aid of the. W. M. Thornton, Junr., 288.
- Cupreine:** Alkaloids containing a phenolic group (morphine, —, adrenaline, etc.); General reaction of. G. Denigés, 343.
- Cupric Solutions:** Cane sugar; Action of — on. Estimation of invert sugar in presence of cane sugar. E. Saillard, 51.
- Cuprous Chloride:** Arsenic by distillation as trichloride; Reduction of arsenic to the arsenious state by — and estimation of. R. C. Roark and C. C. MacDonnell, 217.
- Cyanides:** Ferro- and ferricyanides in the presence of — and thiocyanates; Estimation of. F. G. W. Knapman and E. L. Randall, 253.
- “Dari”:** Kaffir Corn (—) from South Africa. 8.
- Decolorising Efficiency:** Charcoals; Rapid method for comparing the — of. L. Wickenden and J. W. Hassler, 256.
- Densities:** Leamington Spa water; The — and refractive indices of the. C. H. Manley, 267.
- Densities:** Vapour —; Comparative method for determining. P. Blackman, 24.
- Deposits:** Antimony stains or — towards hypochlorite solution; Behaviour of. W. Vaubel and A. Knocke, 147.
- Detergent Action:** Soap; Researches on the — of. S. A. Shorter, 171.
- Dextrose-Lævulose Ratio:** Carbohydrates in plants; Studies of the formation and translocation of. II.: The — in the mangold. W. A. Davis, 93.
- Dextrose:** Plant enzymes; particularly with relation to oxidation; Study of. (Test for distinguishing — and lævulose.) A. D. Hall, E. F. Armstrong, H. E. Armstrong, E. Keeble, and E. J. Russell, 249.
- Dextrose:** Sugars, with remarks on Rübner's Test for — and lactose; Action of normal and basic lead acetate on the. H. Rogerson, 102.
- Dialyser:** Dialysis, and a simple rapid —; Temperature effect in. M. Neidle, 291.

- Dialysis:** Ultrafiltration and pressure —; Collodion membranes for. G. S. Walpole, 152.
- Diastase:** Honey —; Properties of. F. Gothe, 312.
- Dicyanodiamide:** Calcium cyanamide by Caro's Method; Estimation of — in. G. Hager and J. Kern, 346.
- Digestibility:** Bread; — of. I.: Salivary digestion *in vitro*. J. C. Blake, 248.
- Digitonin:** Cholesterol and phytosterol by —; Precipitation of. O. Pfeffer, 317.
- Digitonin:** Phytosterol by precipitation with —; Detection of. A. Olig, 317.
- Dimethylglyoxime:** Nickel with —; Estimation of. K. Wagemann, 83.
- Dip Electrode:** New —. G. J. Van Zoeren, 153.
- Diphenylamine-Sulphuric Acid Reagent:** Preparation of —. W. Toniuss, 314.
- Diphenylglyoxime:** Nickel by Frevert's Method; Use of — as indicator in the volumetric estimation of. G. L. Kelley and J. B. Conant, 348.
- Diphtheria and Tetanus Toxins:** Antigens by ultrafiltration, pressure dialysis, etc., with special reference to —; Detection and concentration of. A. T. Glenny and G. S. Walpole, 137.
- Dissolved Oxygen:** Water; Estimation of — in. J. Miller, 222.
- Distillation:** Aeration and heat — in the Kjeldahl Method for the estimation of nitrogen; Comparative study of. K. G. Falk and K. Sugiura, 186.
- Distillation:** Arsenic by — as trichloride; Reduction of arsenic to the arsenious state by cuprous chloride and estimation of. R. C. Roark and C. C. MacDonnell, 217.
- Dithionates:** Alkali sulphides, thiosulphates, and —; Analysis of a mixture of. J. A. Muller, 104.
- Divalent Metals:** Tertiary phosphates; On the alkalimetric estimation of certain — in the form of, with especial reference to the volumetric determination of cobalt and nickel. W. R. Schoeller and A. R. Powell, 124.
- Drugs:** Microscopical methods: with special reference to the examination of — H. G. Greenish, 195.
- Effluents:** Gases dissolved in waters and —; Estimation of. A. A. Swanson and G. A. Hulett, 17.
- Eggertz Method:** Carbon in steel by —; Estimation of. H. Le Chatelier and F. Bogitch, 218.
- Egyptian Buffalo Milk:** Composition of —. A. Pappel and G. Hogan, 307.
- Egyptian Buffalo Milk:** Fat of —. G. Hogan and E. Griffiths-Jones, 307.
- Electric Current:** Tin, antimony, tungsten, and molybdenum by means of the —; Use of hydrofluoric acid in separation of some heavy metals from. L. W. McCay and N. H. Furman, 149.
- Electrically-Heated:** Bomb furnace. D. F. Calhane and H. A. Lavene, 112.
- Electrode:** Dip —; New. G. J. Van Zoeren, 153.
- Electrode:** Hydrogen —; Simple. H. P. Barendrecht, 111.
- Electrolysis:** Zinc by —; Estimation of. F. Chancel, 187.
- Electrolytic Determination:** Bismuth in bismuth β -naphthol; — of. B. L. Murray, 204.
- Electrolytic Determination:** Mercury in mercury oleates; — of. B. L. Murray, 204.
- Electrolytic Determination:** Mercury in mercury salicylates; — of. B. L. Murray, 204.
- Electrolytic Estimation:** Silver in solutions of silver chloride in ammonia; — of. E. P. Schoch and F. M. Crawford, 350.
- Electrometric Titration:** Vanadium; — of. G. L. Kelley and J. B. Conant, 108.
- Emanation Method:** Radium; Methods for the determination of. II.: The — S. C. Lind, 56.

- Embalming Agents:** Incas; Composition of — used by the. L. Reutter, 203.
- End-Point:** Sulphur in steel; Accurate — in volumetric estimation of. H. Zschvegner, 220.
- Enzymes:** Carbohydrate analysis; Use of — and special yeasts in. W. A. Davis, 138.
- Enzymes:** Honey; The — of. F. Gothe, 312.
- Enzymes:** Plant —; Study of, particularly with relation to oxidation. (Test for distinguishing dextrose and lævulose.) A. D. Hall, E. F. Armstrong, H. E. Armstrong, E. Keeble, and E. J. Russell, 249.
- Enzymes:** Soya Bean; Carbohydrates and — of the. J. P. Street and E. M. Bailey, 9.
- Erbium:** Yttrium; Separation of — from. P. S. Willand and C. James, 257.
- Errata:** —. 356, 391.
- Error:** Colorimetric observations; Possible source of — in. J. H. Long, 153.
- Error:** Iodine titrations; Decomposition of tetrathionates in alkaline solution as a source of — in. R. M. Chapin, 150.
- Error:** Viscosity measurement; Sources of — in. E. C. Bingham, H. I. Schlesinger, and A. B. Coleman, 85.
- Erythrosin:** Bengal Rose; Differentiation and Valuation of — and. A. Leys, 99.
- (Essences):** Liqueurs; Estimation of essential oils — in. C. F. Muttelet, 305.
- (Essences):** Liqueurs; Estimation of essential oils — in. X. Rocques, 306.
- (Essences):** Vermouth; Estimation of essential oils — in. L. Ronnet, 306.
- Essential Oil:** Ginger; "Zingiberol," a new sesquiterpene alcohol occurring in — of. B. T. Brooks, 90.
- Essential Oils:** Iodine value of —; Estimation of the. R. Marcille, 276.
- Essential Oils:** Japanese —; Some. S. Uchida, 88.
- Essential Oils:** Liqueurs; Estimation of — (essences) in. C. F. Muttelet, 305.
- Essential Oils:** Liqueurs; Estimation of — (essences) in. X. Rocques, 306.
- Essential Oils:** Liqueurs; Estimation of — in. C. F. Muttelet, 275.
- Essential Oils:** Liqueurs; Estimation of — in. L. Bonnet, 276.
- Essential Oils:** Vermouth; Estimation of — (essences) in. L. Ronnet, 306.
- Essential Oils:** Vermouth; Estimation of — in. X. Rocques, 89.
- Ester Acids:** Lemon juice; — of. L. Wolfrum and J. Pinnow, 305.
- Ether:** Alcohol and water in —; Estimation of small amounts of. E. Malinckrodt and A. D. Alt, 342.
- Ether:** Alcohol in —; Estimation of. P. Szezerényi, 50.
- Ethyl Alcohol:** Acetone in presence of —; Estimation of. Jitendranath Rakshit, 245.
- Ethyl Alcohol:** Methyl Alcohol in —; Estimation of. G. Reif, 100.
- Ethyl and Methyl Alcohol:** Spirit varnishes; Estimation of — in. G. W. Knight and C. T. Lincoln, 14.
- Euthamia Caroliana (L.) Greene:* Volatile oil of —. G. A. Russell, 281.
- Explosives:** America; Analysis of — permitted in. C. G. Storm, 346.
- Extraction:** Fat —; Apparatus for. I. Selecter, 22.
- Extraction:** Organic acids; Distribution co-efficients and velocity of — of certain. J. Pinnow, 80.
- Extractor:** Fat —; Large. C. L. A. Schmidt, 189.
- Fat:** Analysis; Improved methods for —. E. B. Holland, J. C. Reed, and J. P. Buckley, 252.
- Fat Content:** Dried whole milk; Estimation of the — of. K. Mohs, 378.
- Fat:** Cream; Estimation of — in. L. Lindet, 277.
- Fat:** Egyptian buffalo milk; — of. G. Hogan and E. Griffiths-Jones, 307.
- Fat Extraction:** Apparatus for —. I. Selecter, 22.

- Fat:** Extractor; Large ——. C. L. A. Schmidt, 189.
- Fat:** *Nux Vomica*; — of. H. E. Watt and G. B. Angus, 135.
- Fat:** Powders; A rapid method for the estimation of — in. S. B. Phillips, 122.
- Fat:** Stearic acid in butter —; Estimation of. E. B. Holland, J. C. Reed, and J. P. Buckley, Junr., 209.
- Fats:** Bromination of — and oils; Heat of. J. W. Marden, 176.
- Fats:** Melting-points of —, etc.; Simple method of determining the. A. W. Knapp, 58.
- Fats:** Physical and chemical constants of —; Relationship between the. H. J. Backer, 315.
- Fats:** Rancid —; Analysis of. G. Issoglio, 304.
- Fatty Acids:** Animal fats and oils; Effect of free — upon the flash and fire points of. A. Lowenstein and J. J. Vollersten, 14.
- Feeding:** Butter; The effect of — on the composition of: Decorticated ground nut cake and decorticated cotton cake. H. T. Cranfield, 336.
- Feeding:** Law report. Quality of milk: The — of cows. Hunt v. Richardson. 224.
- Feeding:** Milk and butter; The effect of — on the composition of: Dried yeast and decorticated cotton meal. H. T. Cranfield and M. G. D. Taylor, 240.
- Feeding-Subs:** Amino-Acids of — by the Van Slyke Method; Estimation of the. H. S. Grindley and M. E. Slater, 46.
- Feeding-Subs:** Nitrogenous compounds in —; Valuation of. N. Passerini, 378.
- Feeding-Subs:** Non-protein nitrogenous constituents of —; The. H. S. Grindley and H. C. Eckstein, 277.
- Feeding-Subs:** Use and purchase of —. 133.
- Fehling's Solution:** Pentose or pentosans by means of —; The estimation of. J. L. Baker and H. F. E. Hulton, 294.
- Fehling's Solution:** Testing urine for sugar with —; Cause and significance of an abnormal reaction obtained in. W. Cramer, 96.
- Ferricyanides:** Ferro- and — in the presence of cyanides and thiocyanates; Estimation of. F. G. W. Knapman and E. L. Randall, 253.
- Ferric and Aluminium Hydroxides:** Ammonium chloride upon — during ignition; Effect of. H. W. Daudt, 16.
- Ferric Oxide:** Gravimetric estimation of iron; Ignition of — in the. E. Selch, 54.
- Ferric Salt Solutions:** Permanganate; Reduction of —, and titration of the reduced solutions with. A. Hoenig, 54.
- Ferrocyanides:** Cyanides and thiocyanates; Estimation of — and ferricyanides in the presence of. F. G. W. Knapman and E. L. Randall, 253.
- Fibre:** Analysis; Paper —. M. Cline, 15.
- Fieber's Method:** Tungsten by —; Estimation of. Separation of tin from tungsten. E. Dittler and A. von Graffenried, 351.
- Filter-Paper:** Chemical —; The manufacture of. E. J. Bevan and W. Bacon, 159.
- Filtration:** Reduced pressure; Apparatus for — under. J. C. Irvine, 111.
- First-Runnings:** Benzol —; Analysis of. P. E. Spielmann and F. B. Jones, 344.
- Fixed Oils:** Tropics; Determination of the specific gravity of — in the. C. H. Wright, 213.
- Flash and Fire Points:** Animal fats and oils; Effect of free fatty acids upon the — of. A. Lowenstein and J. J. Vollersten, 14.
- Flour:** Degree of bolting of —; Estimation of the. C. L. Spica, 305.
- Flour:** Offals in the — of cereals; Estimation of the amount of. Heiduschka and Heinich, 133.
- Flour:** Strength and baking qualities of wheat- —; Method for the determination of the. C. H. Bailey, 134.

- Flour:** Wheat —; Proteins of, and their relation to baking strength. M. J. Blish, 210.
- Fluorine:** Estimating —; New Method of. F. Pisani, 218.
- Fluorine:** Estimation of —. W. H. Adolph, 16.
- Fluorspar:** Basic slag in citric acid solutions; Influence of — on the solubility of. G. S. Robertson, 148.
- Food and Drugs Analysis, Abstracts:** 6, 45, 76, 88, 132, 171, 203, 247, 273, 304, 340, and 377.
- Foods:** Canned —; Tin in. W. D. Bigelow, 342.
- Foods:** Inspectors of — for the year 1914-1915; Report on the work of. A. W. J. McFadden, 154.
- Foodstuffs:** Benzoic acid in animal —; Estimation of. K. Baumann and J. Grossfeld, 76.
- Formaldehyde:** Free — and hexamethylenetetramine; Colorimetric method for the determination of. R. J. Collins and P. J. Hanzlik, 283.
- "Formolite" Reaction:** Oil residuals and natural asphalts; — of Nastukoff as applied to. C. Richardson, 212.
- Fractionation Combustion:** Hydrogen and carbon monoxide in gas mixtures; Use of copper oxide for — of. G. A. Burrell and G. G. Oberfell, 183.
- Frevert's Method:** Nickel by —; Use of diphenylglyoxime as indicator in the volumetric estimation of. G. L. Kelley and J. B. Conant, 348.
- Frommer's Test:** Acetone by —; Detection of. N. O. Engfeldt, 80.
- Fruit:** Canadian Vine; Oil from the — of the. S. Fachini and G. Dorta, 309.
- Fruit:** *Cicer Arietinum L.* (Chick Pea); Composition of the — of. A. Zlatároff, 304.
- Fruit:** Jellies; Investigations on —. W. V. Cruess and J. B. McNair, 205.
- Fuel-Bed Conditions:** Softening temperature of coal ash under —; Method and furnace for the determination of the. A. C. Fieldner and A. L. Field, 16.
- Furfural:** Barbituric acid, thiobarbituric acid, and malonylguanidine as quantitative precipitants for —; Comparison of. A. W. Dox and G. P. Plaisance, 384.
- Furnace:** Bomb —; Electrically-Heated. D. F. Calhane and H. A. Lavene, 112.
- Furnace:** Coal ash under fuel-bed conditions; Method and — for the determination of the softening temperature of. A. C. Fieldner and A. L. Field, 16.
- Galactose:** Benzoyldihydromethylketol hydrazine. A new reagent for —. J. von Braun, 385.
- Gas Analysis:** Reagents for use in —. II.: Chromous chloride. R. P. Anderson and J. Riffe, 183.
- Gas Analysis:** Reagents for use in —. III.: Specific absorption of alkaline pyrogallol in various pipettes. R. P. Anderson, 183.
- Gas Analysis:** Reagents for use in —. IV.: Phosphorus in solution. R. P. Anderson and W. Biederman, 191.
- Gas:** Benzol in coke-oven — by Burrell's Vapour Apparatus; Estimation of. L. C. Whiton, 313.
- Gas Mixtures:** Fractionation combustion of hydrogen and carbon monoxide in —; Use of copper oxide for. G. A. Burrell and G. G. Oberfell, 183.
- Gas-Washing Bottle:** Improved form of —. F. R. von Bichowsky and H. Storch, 57.
- Gases:** Waters and effluents; Estimation of — dissolved in. A. A. Swanson and G. A. Hulett, 17.
- Gelatinising Temperature:** Starches by means of a thermo-slide; Determination of the — of. C. K. Francis and O. C. Smith, 248.

- Gems:** Determination of — and precious or ornamental stones without injury to the specimen; Tables for the. A. J. Moses, 18.
- General Reaction:** Alkaloids containing a phenolic group (morphine, cupreine, adrenaline, etc.); — of. G. Denigés, 343.
- Ghee:** "Poli Oil," a new adulterant of — Indian clarified butter-fat. J. H. Barnes and Arjan Singh, 72.
- Ginger:** Essential oil of —; Zingiberol: A new sesquiterpene alcohol occurring in. B. T. Brooks, 90.
- Glass:** Trivalent manganese in —; Note on the identification of. S. R. Scholes, 54.
- Glycerides:** Magenta-sulphurous acid reagent; Detection of — by the. M. François, 141.
- Glycerol:** Sodium glyceroxide; Estimation of — in oils as. H. Bull, 343.
- Glyoxalase:** Blood; Quantitative estimations of — in. H. W. Dudley, 91.
- Goat's Milk:** Admixture of — with cow's milk; Method for detecting the. N. A. Brodrick-Pittari, 308.
- Gold:** Iodimetric Estimation of —. L. Vanino and F. Hartwagner, 319.
- Gold:** Platinum, arsenic, —, selenium, tellurium and molybdenum; Qualitative detection and separation of. P. E. Browning, 84.
- Grain:** Proteolytic strength of germinated — in technical analysis; New method of determining the; Acid Ratio. C. A. Nowak, 10.
- Grain:** Sampling —, seeds, and other material; Device for. E. G. Boerner, 154.
- Graphitic:** Acid. L. Albiano, 51.
- Gravimetric and Perchlorate Cobalti-Nitrite Methods:** Potash; — for determination of. T. D. Jarrell, 83.
- Gravity:** Fixed oils in the tropics; Determination of the specific — of. C. H. Wright, 213.
- Ground Nut Cake:** Butter; The effect of feeding on the composition of: Decorticated — and decorticated cotton cake. H. T. Cranfield, 336.
- Growth:** Boron: Its absorption and distribution in plants, and its effect on —. F. C. Cook, 137.
- Gum Arabic:** — and its quantitative estimation; Qualitative tests for. C. E. Waters and J. B. Tuttle, 205.
- Gum:** Official syrup of —; Estimation of — in the. E. Luce, 340.
- Guncotton:** Soluble nitrocellulose in —; Estimation of. H. C. Mallinson, 214.
- Hæmin Test:** Blood; Improved — for. W. Beam and G. A. Freak, 92.
- Haldane's Apparatus:** Carbon dioxide in air by —; Estimation of. R. C. Frederick, 105.
- Halogen:** Carbon and — by the chromic acid method; Simultaneous estimation of. P. W. Robertson, 140.
- Halogens:** Organic compounds; Detection and estimation of — in. I. Drogin and M. A. Rosanoff, 148.
- Hardness:** Natural waters, and the use of methyl red as an indicator; Estimation of — of. S. A. Kay and S. H. Newlands, 220.
- Hardness:** Potassium palmitate; Estimation of total — (in waters) by. M. Tilgner, 351.
- Heat:** Aeration and — distillation in the Kjeldahl Method for the estimation of nitrogen; Comparative study of. K. G. Falk and K. Sugiura, 186.
- Heat:** Bromination of fats and oils; — of. J. W. Marden, 176.
- Heat:** Non-sporing bacteria in milk to the action of —; Resistance of. C. Gorini, 381.

- Heavy Metals:** Tin, antimony, tungsten, and molybdenum by means of the electric current; Use of hydrofluoric acid in separation of some — from. L. W. McCay and N. H. Furman, 149.
- Hexamethylenetetramine:** Free formaldehyde and —; Colorimetric method for the determination of. R. J. Collins and P. J. Hanzlik, 283.
- Honey Diastase:** Properties of —. F. Gothe, 312.
- Honey:** Enzymes of —; The. F. Gothe, 312.
- Hopkins-Cole Reaction:** Protein; — for. H. G. D. Bredahl, 101.
- Hops:** Moisture and bitter principles in —; Estimation of. C. Winge, 6.
- Hops:** Various geographic localities; Resins in — from. G. A. Russell, 47.
- Human Milk:** Note on —. G. D. Elsdon, 74.
- Hydrocarbon:** Shark liver oil; Highly unsaturated — in. M. Tsujimoto, 385.
- Hydrocarbons:** Mixtures containing unsaturated —; Direct estimation of carbon monoxide in. A. Piva, 141.
- Hydrochloride Method:** Alkaloids by the —; Estimation of. G. D. Beal and E. Brady, 132.
- Hydrocyanic Acid:** Beans; Detection and estimation of — in. L. Guignard, 380.
- Hydrocyanic Acid:** Small quantities of —; Estimation of. M. O. Johnson, 252.
- Hydrofluoric Acid:** Heavy metals from tin, antimony, tungsten, and molybdenum by means of the electric current; Use of — in separation of some. L. W. McCay and N. H. Furman, 149.
- Hydrogen:** Carbon, —, and mercury in organo-mercuric compounds; Simultaneous estimation of. Grignard and A. Abelmann, 98.
- Hydrogen Electrode:** —; Simple. H. P. Barendrecht, 111.
- Hydrogen:** Gas Mixtures; Use of copper oxide for fractionation combustion of — and carbon monoxide in. G. A. Burrell and G. G. Oberfell, 183.
- Hydrogen Ion Concentration:** Acidimetry and alkalimetry and for determination of —; Sensitive indicator for. M. T. Bogert and G. Scatchard, 315.
- Hydrogen Ion Concentration:** Cell for the determination of —; Simple. J. H. Long, 188.
- Hydrogen Ions:** Sea-water; Use of solutions of borax and boric acid in the colorimetric estimation of the concentration of — in. S. Palitzsch, 387.
- Hydrogen Peroxide:** Metals towards certain acids containing —; Behaviour of. E. Salkowski, 257.
- Hydrogen Peroxide:** Reaction of —; New. K. Spiro, 54.
- Hydrogenated:** Chrysalis oil. M. Tsujimoto, 345.
- Hydroxyl Ions:** Concentration of —; Determination of the. F. Francis, F. H. Geake, and J. W. Roche, 22.
- Hyoscyamine:** Atropine. —, and scopolamine; Sensitive colour reaction for. R. Wasicky, 45.
- Hyoscyamus:** Minnesota; — Cultivated in. E. L. Newcomb and M. H. Haynes, 79.
- Hypochlorite Solution:** Antimony stains or deposits towards —; Behaviour of. W. Vaubel and A. Knocke, 147.
- Ignition:** Ferric and aluminium hydroxides during —; Effect of ammonium chloride upon. H. W. Daudt, 16.
- Ignition:** Iron; — of ferric oxide in the gravimetric estimation of. E. Selch, 54.
- Illipé Nuts:** Borneo tallow; — and the sources of. 7.
- Incas:** Embalming agents used by the —; Composition of. L. Reutter, 203.
- Incense Cedar:** *Coniferae*; Oils of the. V.: The leaf and twig and bark oils of —. A. W. Schorger, 177.
- Indian Clarified Butter-Fat:** Ghee —; "Poli Oil," a new adulterant of. J. H. Barnes and Arjan Singh, 72.

- Indicator:** Acidimetry and alkalimetry and for determination of hydrogen ion concentration; Sensitive — for. M. T. Bogert and G. Scatchard, 315.
- Indicator:** Diphenylglyoxime as — in the volumetric estimation of nickel by Frevet's Method. G. L. Kelley and J. B. Conant, 348.
- Indicator:** Methyl orange as —; Titrations with oxalic acid, using. G. Bruhns, 317.
- Indicator:** Methyl red as an —; Estimation of hardness of natural waters, and the use of. S. A. Kay and S. H. Newlands, 220.
- Indicator:** Nicotine by Toth's Method; Methyl red as an — in the estimation of. P. Schick and G. Hatos, 308.
- Industrial Sugars:** Reducing sugars other than invert sugar; Presence in — of. L. Maquenne, 180.
- Inorganic Analysis, Abstracts:** 16, 52, 82, 103, 147, 181, 217, 255, 286, 318, 347, and 386.
- Inspectors:** Work of — of foods for the year 1914-1915; Report of the. A. W. J. MacFadden, 154.
- Institute of Chemistry:** 62, 116, and 266.
- Inversion:** Crystallisable sugar by —; Yeast preparation for use in the estimation of. H. Pellet, 381.
- Invert Sugar:** Cane sugar; Action of cupric solutions on. Estimation of — in presence of cane sugar. E. Saillard, 51.
- Invert Sugar:** Cane sugar and — on alkaline copper solutions; Comparative actions of. L. Maquenne, 178.
- Invert Sugar:** Reducing sugars other than —; Presence in industrial sugars of. L. Maquenne, 180.
- Iodates:** Differential Iodimetry. Estimation of periodates, —, bromates, and chlorates in presence of each other. O. L. Barnebey, 106.
- Iodic Acid-Starch Reaction:** Wine and vinegar; Use of the — in the examination of. J. Jaenpretre, 379.
- Iodimetric Estimation:** Gold; — of. L. Vanino and F. Hartwagner, 319.
- Iodimetry:** Differential —. Estimation of periodates, iodates, bromates, and chlorates in presence of each other. O. L. Barnebey, 106.
- Iodine:** Bromine and — in the presence of chlorides; Estimation of. L. W. Winkler, 104.
- Iodine:** Saline waters; Estimation of — and bromine in. D. E. Popa, 184.
- Iodine:** Subliming and weighing small quantities of —; Device for. G. Fouque, 322.
- Iodine:** Tetrathionates in alkaline solution as a source of error in certain — titrations; Decomposition of. R. M. Chapin, 150.
- Iodine Titration:** Thiosulphate sulphur in lime-sulphur solutions by —; Estimation of. P. L. Blumenthal and S. D. Averitt, 350.
- Iodine Value:** Essential oils; Estimation of the — of. R. Marcille, 276.
- Ions:** Concentration of hydroxyl —; Determination of the. F. Francis, F. H. Geake, and J. W. Roche, 22.
- Ions:** Sea-water; Use of solutions of borax and boric acid in the colorimetric estimation of the concentration of hydrogen — in. S. Palitzsch, 387.
- Irish Oak:** Ancient —. P. A. E. Richards, 303.
- Iron Citrate Method:** Basic slag by the —; Estimation of citrate-soluble phosphoric acid in. M. Popp, 186.
- Iron:** Copper and — in pig lead, lead oxides, and lead carbonate; Colorimetric method for the determination of. B. S. White, 53.
- Iron:** Copper and —; Rapid method for the estimation of. G. Edgar, 181.
- Iron:** Ferric oxide in the gravimetric estimation of —; Ignition of. E. Selch, 54.
- Iron:** Organic substances; Rapid estimation of — in presence of. F. Ferrari, 82.

- Iron:** Phosphoric acid and a small amount of —; Modification of McCrudden's Method for calcium, for estimation of calcium and strontium in presence of. O. B. Winter, 287.
- Iron:** Thorium from — with the aid of the ammonium salt of nitrosophenylhydroxylamine ("Cupferron"); The Separation of. W. M. Thornton, Junr., 288.
- Irons:** Carbon in steels and — by direct combustion in oxygen at high temperatures; Estimation of. J. R. Cain and H. E. Cleaves, 218.
- Isothiocyanates:** New test for —. G. Denigès, 14.
- Japanese Essential Oils:** —; Some. S. Uchida, 88.
- Jellies:** Fruit —; Investigations on. W. V. Cruess and J. B. McNair, 205.
- Juice:** Lemon —; Ester acids of. L. Wolfrum and J. Pinnow, 305.
- Kaffir Corn:** South Africa; — ("Dari") from. 8.
- Kendall's Solution:** Reducing sugars by —; Estimation of, and the construction of a table indicating the reducing power of lævulose. E. G. Wilson and W. R. G. Atkins, 285.
- Kernels:** *Pseudo-phœnix Vinifera Beccari*; Seed — of. A. L. van Scherpenberg, 282.
- Kjeldahl Method:** Nitrogen; Comparative study of aeration and heat distillation in the — for the estimation of. K. G. Falk and K. Sugiura, 186.
- Laboratory Reflux Condensers:** Relative efficiency of —; Comparison of the. M. V. Dover and J. W. Marden, 352.
- Lactose:** Sugars, with remarks on Rübner's Test for dextrose and —; Action of normal and basic lead acetate on the. H. Rogerson, 102.
- Lævulose:** Plant enzymes, particularly with relation to oxidation; Study of. (Test for distinguishing dextrose and —.) A. D. Hall, E. F. Armstrong, H. E. Armstrong, E. Keeble, and E. J. Russell, 249.
- Lævulose:** Table indicating the reducing power of —; Estimation of reducing sugars by Kendall's Solution, and the construction of a. E. G. Wilson and W. R. G. Atkins, 285.
- Lamb:** Mutton and —; Composition and nutritive value of. A. M. Wright, 134.
- Lead Acetate:** Carbohydrates; Estimation of —. V.: The supposed precipitation of reducing sugars by basic —. W. A. Davis, 382.
- Lead Acetate:** Normal and basic — on the sugars, with remarks on Rübner's Test for dextrose and lactose; Action of. H. Rogerson, 102.
- Lead Acetate Tests:** Maple products; Analysis of. VIII.: Volumetric basic — for purity of maple syrups. J. F. Snell, N. C. MacFarlane, and C. J. van Zoeren, 207.
- Lead Acetate Tests:** Maple products; Analysis of. VIII.: Application of the conductivity and volumetric basic — to maple sugar. J. F. Snell and C. J. van Zoeren, 208.
- Lead:** Approximate assay for —; Rapid. G. Torossian, 219.
- Lead Carbonate:** Pig lead, lead oxides, and —; Colorimetric method for the Determination of copper and iron in. B. S. White, 53.
- Lead:** Copper and iron in pig —, — oxides, and — carbonate; Colorimetric method for the determination of. B. S. White, 53.
- Lead:** — Sulphite; Estimation of — as. H. Pellet, 257.
- Lead Oxides:** Pig lead, —, and lead carbonate; Colorimetric method for the determination of copper and iron in. B. S. White, 53.
- Lead Sulphite:** Lead as —; Estimation of. H. Pellet, 257.
- Lead:** Volumetric estimation of —; The. J. Waddell, 270.

- Leaf and Twig and Bark Oils:** *Coniferae*; Oils of the. V.: The — of Incense Cedar. A. W. Schorger, 177.
- Leaf:** Carbohydrates in plants; Studies of the formation and translocation of. I.: The carbohydrates of the mangold —. W. A. Davis, A. J. Daish, and G. C. Sawyer, 92.
- Leaf:** Carbohydrates in plants; Studies of the formation and translocation of. III.: The carbohydrates of the — and — stalks of the potato. W. A. Davis and G. C. Sawyer, 94.
- Leamington Spa:** Water; The densities and refractive indices of the —. C. H. Manley, 267.
- Lemon and Orange Extracts:** Non-alcoholic —; Analysis of. E. L. Redfern, 236.
- Lemon Juice:** Ester acids of —. L. Wolfrum and J. Pimnow, 305.
- Lignites:** Ammonium nitrate in estimating the calorific power of —; Use of. R. Salvadori, 344.
- Lime-Sulphur Solutions:** Analysis of —; New methods for. R. M. Chapin, 184.
- Lime-Sulphur Solutions:** Polysulphides and thiosulphate in —; Separation and estimation of. S. D. Averitt, 288.
- Lime-Sulphur Solutions:** Thiosulphate sulphur in — by iodine titration; Estimation of. P. L. Blumenthal and S. D. Averitt, 350.
- Liqueurs:** Essential oils (essences) in —; Estimation of. C. F. Muttelet, 305.
- Liqueurs:** Essential oils (essences) in —; Estimation of. X. Rocques, 306.
- Liqueurs:** Essential oils in —; Estimation of. C. F. Muttelet, 275.
- Liqueurs:** Essential oils in —; Estimation of. L. Bonnet, 276.
- Liquids:** Mixed organic —; The application of the method of constant boiling-point mixtures to the qualitative analysis of certain. W. R. G. Atkins, 334.
- Lutes:** Cements; — and. S. S. Sadtler, 262.
- Madia Sativa:* Seed and Oil, 7.
- Magenta-Sulphurous Acid Reagent:** Glycerides by the —; Detection of. M. François, 141.
- Magnesium:** Natural waters; Estimation of calcium and — in. S. A. Kay and S. H. Newlands, 221.
- Magnesium Salts:** Ammonium carbonate; Precipitation of — by. F. Fichter and R. Osterwalder, 319.
- Magnesium:** Sulphides of tin, antimony, and arsenic; Action of — on the. C. Pertusi, 19.
- Malonylguanidine:** Furfural; Comparison of thiobarbituric acid, barbituric acid, and — as quantitative precipitants for. A. W. Dox and G. P. Plaisance, 384.
- Manganese:** Glass; Note on the identification of trivalent — in. S. R. Scholes, 54.
- Mangold:** Carbohydrates in plants; Studies of the formation and translocation of. II.: The dextrose-lævulose ratio in the —. W. A. Davis, 93.
- Mangold Leaf:** Carbohydrates in plants; Studies of the formation and translocation of. I.: The carbohydrates of the —. W. A. Davis, A. O. Daish, and G. C. Sawyer, 92.
- Maple Products:** Analysis of —. V. J. F. Snell, 207.
- Maple Products:** Analysis of —. VII. J. F. Snell, 306.
- Maple Products:** Analysis of —. VI.: Volumetric basic lead acetate test for purity of maple syrups. J. F. Snell, N. C. MacFarlane, and G. J. van Zoeren; 207.
- Maple Products:** Analysis of —. VIII.: Application of the conductivity and volumetric basic lead acetate tests to maple sugar. J. F. Snell and G. J. van Zoeren, 208.

- McCrudden's Method:** Calcium; Modification of — for, for estimation of calcium and strontium in presence of phosphoric acid and a small amount of iron. O. B. Winter, 287.
- Meal:** Milk and butter; The effect of feeding on the composition of: Dried yeast and decorticated cotton —. H. T. Cranfield and M. G. D. Taylor, 240.
- Measurement:** Error in viscosity —; Sources of. E. C. Bingham, H. I. Schlesinger, and A. B. Coleman, 85.
- Measurement:** Viscosity —; Unit of. P. C. McIlhiney, 223.
- Measurements:** High temperatures; Calorimetric — at. S. Tamaru, 110.
- Meats:** Nitrites and nitrates in —, sausages, etc.; Detection and estimation of. D. Acél, 308.
- Mechanical Means:** Precipitates by —; Washing. E. Sinkinson, 390.
- Mechanical Soil Analysis:** Method of —. O. Swen, 23.
- Melting-Point:** Salicylic acid; Note on the — of, and a test for the presence of para-hydroxybenzoic acid. H. L. Smith, 3.
- Melting-Points:** Fats, etc.; Simple method of determining the — of. A. W. Knapp, 58.
- Membranes:** Ultrafiltration and pressure dialysis; Collodion — for. G. S. Walpole, 152.
- Mercury:** Carbon, hydrogen, and — in organo-mercuric compounds; Simultaneous estimation of. Grignard and A. Abelmann, 98.
- Mercury:** — oleates; Electrolytic determination of — in. B. L. Murray, 204.
- Mercury:** — Salicylates; Electrolytic determination of — in. B. L. Murray, 204.
- Metabolic Activity:** Respiration Calorimeter, partly automatic, for the study of — of small magnitude. C. F. Langworthy and R. D. Milner, 390.
- Metallic Borates:** Borax and —. L. Vanino, 52.
- Metallic Oxides:** Phenylhydrazine on certain —; Reducing action of. E. Puxeddu, 101.
- Metallic Silver:** Vanadic acid after reduction by —; Estimation of. G. Edgar, 290.
- Metals:** Acids containing hydrogen peroxide; Behaviour of — towards certain. E. Salkowski, 257.
- Metals:** Qualitative analysis; Separation of — of the tin group in. J. M. Welch and H. C. P. Weber, 258.
- Metals:** Tertiary phosphates; On the alkalimetric estimation of certain divalent — in the form of, with especial reference to the volumetric determination of cobalt and nickel. W. R. Schoeller and A. R. Powell, 124.
- Metals:** Tin, antimony, tungsten, and molybdenum by means of the electric current; Use of hydrofluoric acid in separation of some heavy — from. L. W. McCay and N. H. Furman, 149.
- Methoxy Group:** Compounds containing sulphur; Estimation of the — in. A. Kirpal and T. Bühn, 253.
- Methyl Alcohol:** Ethyl alcohol; Estimation of — in. G. Reif, 100.
- Methyl Alcohol:** Rinck's Method for the detection of —. G. Fendler, 316.
- Methyl and Ethyl Alcohol:** Spirit varnishes; Estimation of — in. G. W. Knight and C. T. Lincoln, 14.
- Methyl Orange:** Oxalic acid, using — as indicator; Titrations with. G. Bruhns, 317.
- Methyl Red:** Hardness of natural waters, and the use of — as an indicator; Estimation of. S. A. Kay and S. H. Newlands, 220.
- Methyl Red:** Nicotine by Toth's Method; — as an indicator in the estimation of. P. Schick and G. Hatos, 308.
- Micro-Reactions:** Carbon disulphide; — of. J. Denigès, 12.

- Microscopical Methods:** Drugs; —: With special referencé to the examination of. H. G. Greenish, 195.
- Microscopy:** Quantitative —. T. E. Wallis, 357.
- Milk:** *Bacillus Sporogenes* in — and water; Simple test for. O. Weinziel, 48.
- Milk:** Bacteria in —; Rapid method of counting. W. D. Frost, 48.
- Milk:** *Bacterium abortus* in —; Agglutination test as a means of studying the presence of. L. H. Cooledge, 91.
- Milk:** Casein in —; Comparison of methods for the estimation of. C. B. Hersey, 203.
- Milk:** Citric acid in —; Estimation of. R. Kunz, 378.
- Milk:** Condensed —; Estimation of cane sugar in. G. W. Knight and G. Formaněk, 132.
- Milk:** Egyptian buffalo —; Composition of. A. Pappel and G. Hogan, 307.
- Milk:** Egyptian buffalo —; Fat of. G. Hogan and E. Griffiths Jones, 307.
- Milk:** Fat content of dried whole —; Estimation of the. K. Mohs, 378.
- Milk:** Feeding on the composition of — and butter; The effect of: Dried yeast and decorticated cotton meal. H. T. Cranfield and M. G. D. Taylor, 240.
- Milk:** Goat's — with cow's —; Method for detecting the admixture of. N. A. Brodrick-Pittari, 308.
- Milk:** Human —; Note on. G. D. Elsdon, 74.
- Milk:** Law report. Quality of —: The feeding of cows. Hunt v. Richardson, 224.
- Milk:** Non-sporing bacteria in — to the action of heat; Resistance of. C. Gorini, 381.
- Milk:** Pasteurisation and biorisation of —; Comparative experiments on the. R. Burri and A. C. Thaysen, 10.
- Milk:** Peroxidase reaction in —. W. Grimmer, 172, 341.
- Milk:** Reaction and calcium content of — as factors in the coagulation process. T. H. Milroy, 95.
- Mineral Phosphates:** Citric acid solution; Solubility of — in. G. S. Robertson, 148.
- Minnesota:** *Hyoseyamus* cultivated in —. E. L. Newcomb and M. H. Haynes, 79.
- Mixed and Spent Acids:** Analysis of —. L. Wuyts, 103.
- Mixtures:** Benzene and toluene in commercial —; The estimation of. A. Edwards, 250.
- Mixtures:** Carbon monoxide in — containing unsaturated hydrocarbons; Direct estimation of. A. Piva, 141.
- Mohler's Reaction:** Benzoic Acid; Modification of — for. J. Grossfeld, 97.
- Moisture:** Calcium carbide method; Estimation of — in syrups by the. R. M. West, 186.
- Moisture:** Hops; Estimation of — and bitter principles in. O. Winge, 6.
- Moisture:** Resinous woods; Estimation of — in. E. Azzarello, 389.
- Molecular Weights:** Varnish Analysis. I.: — of vegetable oils. M. Y. Seaton and G. B. Sawyer, 254.
- Molecular Weights:** Vegetable oils; — of certain. H. J. Backer, 47.
- Molybdenum:** Heavy metals from tin, antimony, tungsten, and — by means of the electric current; Use of hydrofluoric acid in separation of some. L. W. McCay and N. H. Furman, 149.
- Molybdenum:** Platinum, arsenic, gold, selenium, tellurium and —; Qualitative detection and separation of. P. E. Browning, 84.
- Morphine:** Alkaloids containing a phenolic group (—, cupreine, adrenaline, etc.); General reaction of. G. Denigès, 343.

- Morphine:** Cats and rabbits; Quantitative estimation of — in the various organs when injected into. A. W. Homberger and J. C. Munch, 342.
- Mould:** Spores; Effect of Pasteurisation on. C. Thom and S. H. Ayers, 210.
- Mutton:** Lamb; Composition and nutritive value of — and. A. M. Wright, 134.
- Naphthalene:** Ammonia; Solubility of — in. S. Hilpert, 142.
- Nastukoff:** Oil residuals and natural asphalts; "Formolite" reaction of — as applied to. C. Richardson, 212.
- Natural Waters:** Carbonic acid, combined and free, in solution, particularly in —. J. Johnston, 255.
- Needle:** Bituminous materials; New penetration — for use in testing. C. S. Reeve and P. Pritchard, 190.
- Neo-Salvarsan:** Salvarsan and —; Excretion and secretion of. J. Webster, 231.
- Nickel:** Cobalt and —; On the alkalimetric estimation of certain divalent metals in the form of tertiary phosphates, with especial reference to the volumetric determination of. W. R. Schoeller and A. R. Powell, 124.
- Nickel:** Cobalt salts; Detection of — in. A. R. Middleton and H. L. Miller, 348.
- Nickel:** Dimethylglyoxime; Estimation of — with. K. Wagemann, 83.
- Nickel:** Diphenylglyoxime as indicator in the volumetric estimation of — by Frevert's Method; Use of. G. L. Kelley and J. B. Conant, 348.
- Nickel Hydroxide:** Tannin estimation; Use of — in. P. Singh and T. P. Ghose, 102.
- Nicotine:** Tobacco and tobacco extracts; Estimation of — in. A critical examination of methods. H. B. Rasmussen, 208.
- Nicotine:** Toth's Method; Methyl red as an indicator in the estimation of — by. P. Schick and G. Hatos, 308.
- Ninhydrin Reaction:** Amino-acids and ammonium salts; — with. V. J. Harding and F. H. S. Warneford, 283.
- Nitrates:** Nitrites and — in meats, sausages, etc.; Detection and estimation of. D. Acél, 308.
- Nitrates:** Organic matter; Detection of — in the presence of. A. Ingle, 107.
- Nitrates:** Soil; Estimation of — in. R. S. Potter and R. S. Snyder, 20.
- Nitrites:** Meats, sausages, etc.; Detection and estimation of — and nitrates in. D. Acél, 308.
- Nitrites:** Volumetric estimation of —. B. S. Davisson, 349.
- Nitrocellulose:** Guncotton; Estimation of soluble — in. H. C. Mallinson, 214.
- Nitrogen:** Aeration and heat distillation in the Kjeldahl Method for the estimation of —; Comparative study of. K. G. Falk and K. Sugiura, 186.
- Nitrogen:** Rain and snow; —, chlorine, and sulphates in. B. Artis, 83.
- Nitrogen:** Sewage; Modification of Whipple's Method of estimating organic — in. F. W. Bruckmiller and L. E. Jackson, 254.
- Nitrogen:** Soil; Amino-Acid — of. R. S. Potter and R. S. Snyder, 48.
- Nitrogenous Compounds:** Feeding-stuffs; Valuation of — in. N. Passerini, 378.
- Nitrogenous Constituents:** Feeding-stuffs; The non-protein — of. H. S. Grindley and H. C. Eckstein, 277.
- Nitrosophenylhydroxylamine:** Ammonium salt of — ("Cupferron"); The separation of thorium from iron with the aid of the. W. M. Thornton, Junr., 288.
- Nitrous Oxide:** Air, water-vapour, and nitrous oxide in mixtures of these three constituents; Estimation of. G. A. Burrell and G. W. Jones, 318.
- Non-Alcoholic Lemon and Orange Extracts:** Analysis of —. E. L. Redfern, 206.
- Non-Protein Nitrogenous Constituents:** Feeding-stuffs; The — of. H. S. Grindley and H. C. Eckstein, 277.
- Non-Spattering:** Wash-bottle. F. C. Clapp, 323.

Non-Sporing Bacteria: Milk; Resistance of — in, to the action of heat. C. Gorini, 381.

Normal and Basic Lead Acetate: Rubner's Test for dextrose and lactose; Action of — on the sugars, with remarks on. H. Rogerson, 102.

Nutritive Value: Mutton and lamb; Composition and — of. A. M. Wright, 134.

Nuts: Illipé — and the sources of Borneo tallow. 7.

Nux Vomica: Fat of —. H. E. Watt and G. B. Angus, 135.

Oak: Irish —; Ancient. P. A. E. Richards, 303.

Oak: Russian —; Note on a specimen of ancient. P. A. E. Richards, 169.

Obituary Notices:

Levy, Arthur Garfield, B.Sc., F.I.C., 293.

Meldola, Raphael, F.R.S., 27.

Sir William Ramsay, F.R.S., K.C.B., 329.

Roscoe, Sir Henry Enfield, F.R.S., 63.

Offals: Cereals; Estimation of the amount of — in the flour of. Heiduschka and Heinich, 133.

Official Syrup: Gum in the — of gum; Estimation of. E. Luce, 340.

Oil: Canadian Vine; — from the fruit of the. S. Fachini and G. Dorta, 309.

Oil Residuals: — and natural asphalts; "Formolite" Reaction of Nastukoff as applied to. C. Richardson, 212.

Oil-Seeds: American palms; Some new — derived from. G. T. Bray and F. L. Elliott, 298.

Oil Varnish: Volatile "thinner" in —; Estimation of. E. W. Boughton, 318.

Oils: Analysing —; New method of. A. Mazzaron, 135.

Oils: *Coniferae*; — of the. V.: The leaf and twig and bark — of Incense Cedar. A. W. Schorger, 177.

Oils: Fats and —; Heat of bromination of. J. W. Marden, 176.

Oils: Glycerol in — as sodium glyceroxide; Estimation of. H. Bull, 343.

Oils: Redwood and Ostwald Viscometers; Viscosity of — in the. C. A. Savill and A. W. Cox, 112.

Oils: Specific gravity of fixed — in the tropics; Determination of the. C. H. Wright, 213.

Oleomargarine: Natural and artificial pigments in — and butter; Detection of. L. S. Palmer and W. E. Thrun, 278.

Optical Dispersion: Purity; — of Chinese wood oil as an index of. E. E. Ware, 176.

Optimal Conditions: Taka-diastrase; — for the proteoclastic action of. S. Okada, 281.

Optimal Reaction: Pepsin; — for. S. Okada, 281.

Orange Extracts: Non-alcoholic lemon and —; Analysis of. E. L. Redfern, 206.

Organic Acids: Extraction of certain —; Distribution of co-efficients and velocity of. J. Pinnow, 80.

Organic Analysis, Abstracts: 12, 50, 80, 97, 140, 174, 212, 250, 282, 313, 342, and 381.

Organic Compounds: Halogens in —; Detection and estimation of. I. Drogin and M. A. Rosanoff, 148.

Organic Liquids: Qualitative analysis of certain mixed —; The application of the method of constant boiling-point mixtures to the. W. R. G. Atkins, 334.

Organic Matter: Nitrates in the presence of —; Detection of. A. Tingle, 107.

Organic Nitrogen: Sewage; Modification of Whipple's Method of estimating — in. F. W. Bruckmiller and L. E. Jackson, 254.

Organic Substances: Iron in presence of —; Rapid estimation of. F. Ferrari, 82.

- Organo-Mercuric Compounds:** Carbon, hydrogen, and mercury in —; Simultaneous estimation of. Grignard and A. Abelmann, 98.
- Ornamental Stones:** Gems and precious or — without injury to the specimen; Tables for the determination of. A. J. Moses, 18.
- Oscillaria Prolifica:** Chemical composition of —. B. B. Turner, 280.
- Ostwald and Redwood Viscometers:** Oils in the —; Viscosity of. C. A. Savill and A. W. Cox, 112.
- Oven:** Pump used in exhausting a vacuum —; Simple device for regulating. G. P. Plaisance and D. V. Moses, 263.
- "Owere" Seeds:** Oil from —. 8.
- Oxalic Acid:** Methyl orange as indicator; Titrations with —, using. G. Bruhns, 317.
- Oxidation:** Cold-storage butter; Progressive — of. D. C. Dyer, 377.
- Oxidation:** Plant enzymes; Study of, particularly with relation to —. (Test for distinguishing dextrose and lævulose.) A. D. Hall, E. F. Armstrong, H. E. Armstrong, E. Keeble, and E. J. Russell, 249.
- Oxide:** Aluminium as —; Estimation of. W. Blum, 286.
- Oxide:** Prussian Blue in spent —; Estimation of. E. L. Randall, 142.
- Oxide:** Sulphur in spent —; Estimation of. E. V. Espenhahn, 150.
- Oxides:** Phenylhydrazine on certain metallic —; Reducing action of. E. Puxeddu, 101.
- Oxycholesterol:** Colour reaction for —. M. C. Rosenheim, 284.
- Oxygen:** Direct combustion in — at high temperatures; Estimation of carbon in steels and irons by. J. R. Cain and H. E. Cleaves, 218.
- Oxygen:** Permanganate methods for the estimation of required — [in water analysis]; Comparison of the. J. H. Sachs, 221.
- Oxygen:** Reagent for estimation of —; Sodium pyrogallate as. J. W. Shipley, 349.
- Oxygen:** Water; Estimation of dissolved — in. J. Miller, 222.
- Palms:** Oil-seeds derived from American —; Some new. G. T. Bray and F. L. Elliott, 298.
- Paper:** Chemical filter- —; The manufacture of. E. J. Bevan and W. Bacon, 159.
- Paper Fibre:** Analysis. M. Cline, 15.
- Papers:** Cigarette —; Analysis and composition of some. S. Jordan, 345.
- Paracetaldehyde:** Mixtures of — and acetal; Estimation of. K. V. P. Orton and P. V. McKie, 143.
- Para-Hydroxybenzoic Acid:** Salicylic acid; Note on the melting-point of, and a test for the presence of —. H. L. Smith, 3.
- Parchments:** Vegetable —; Methods of analysing. R. W. Sindall and W. Bacon, 101.
- Pasteurisation:** Milk; Comparative experiments on the — and biorisation of. - R. Burri and A. C. Thaysen, 10.
- Pasteurisation:** Mould spores; Effect of — on. C. Thom and S. H. Ayers, 210.
- Penetration Needle:** Bituminous materials; New — for use in testing. C. S. Reeve and P. Pritchard, 190.
- Pentosans:** Pentose or — by means of Fehling's Solution; The estimation of. J. L. Baker and H. F. E. Hulton, 294.
- Peppermint:** Spirit of —; Analysis of. H. L. Thompson, 277.
- Pepsin:** Alumina; Adsorption of aqueous solutions of — by. M. A. Rakuzin and E. M. Braudo, 79.
- Pepsin:** Optimal reaction for —. S. Okada, 281.

- Pepsin**: Rose's Method for the estimation of —; Modification of. M. H. Givens, 49.
- Perchlorate and Gravimetric Cobalti-Nitrite Methods**: Potash; — for determination of. T. D. Jarrell, 83.
- Perchlorate**: Potassium and sodium by the use of aniline —; Separation of, and the subsequent estimation of the sodium. D. V. Hill, 55.
- Periodates**: Differential Iodimetry. Estimation of —, iodates, bromates, and chlorates in presence of each other. O. L. Barnebey, 106.
- Permanganate**: Ferric salt solutions; Reduction of, and titration of the reduced solutions with —. A. Hoenig, 54.
- Permanganate Methods**: Required oxygen [in water analysis]; Comparison of the — for the estimation of. J. H. Sachs, 221.
- Permanganate**: Strongly alkaline solutions; Titrations with — in. B. Brauner, 258.
- Peroxidase Reaction**: Milk; — in. W. Grimmer, 172, 341.
- Peroxide**: Acids containing hydrogen —; Behaviour of metals towards certain. E. Salkowski, 257.
- Peroxide**: Hydrogen —; New reaction of. K. Spiro, 54.
- Phenol**: Alcohol in the presence of —; Estimation of. J. Ehrlich, 212.
- Phenol**: Uric acid and —; New salt of uric acid and its application to the analysis of. J. L. Morris, 282.
- Phenolic Group**: Alkaloids containing a — (morphine, cupreine, adrenaline, etc.); General reaction of. G. Denigès, 343.
- Phenylhydrazine**: Metallic oxides; Reducing action of — on certain. E. Puxeddu, 101.
- Philippine**: Beeswax. H. C. Brill and F. Ageoli, 341.
- Phosphates**: Certain divalent metals in the form of tertiary —; On the alkalimetric estimation of, with especial reference to the volumetric determination of cobalt and nickel. W. R. Schoeller and A. R. Powell, 124.
- Phosphates**: Citric acid solution; Solubility of mineral — in. G. S. Robertson, 148.
- Phosphates**: Soils; Comparison of methods for estimation of — in. W. O. Robinson, 187.
- Phosphoric Acid**: Ammonium fluoride; Loss of — during fusion with. W. A. Davis and J. A. Prescott, 388.
- Phosphoric Acid**: Basic slag by the iron citrate method; Estimation of citrate-soluble — in. M. Popp, 186.
- Phosphoric Acid**: McCrudden's Method for calcium, for estimation of calcium and strontium in presence of — and a small amount of iron; Modification of. O. B. Winter, 287.
- Phosphoric Acid**: Water; Detection and estimation of very small amounts of —, especially in. P. Medinger, 20.
- Phosphorus**: Gas analysis; Reagents for use in. IV.: — in solution. R. P. Anderson and W. Biederman, 191.
- Phosphorus Hydride**: Estimation of —. H. Reckleben, 55.
- Phosphorus**: Plant materials; Estimation of — in. A. W. Christie, 247.
- Physical and Chemical Constants**: Fats; Relationship between the — of. H. J. Backer, 315.
- Phytosterol**: Cholesterol and — by digitonin; Precipitation of. O. Pfeffer, 317.
- Phytosterol**: Digitonin; Detection of — by precipitation with. A. Olig, 317.
- Phytosterol**: Vegetable oils; Estimation of — in. M. Klostermann and H. Opitz, 317.
- Picric Acid**: Reaction of —, and its applications; New. J. Castets, 144.
- Picric Acid**: Urine and viscera; Detection of — in. E. Kohn-Abrest, 313.

- Pig Lead:** Copper and iron in —, lead oxides, and lead carbonate; Colorimetric method for the determination of. B. S. White, 53.
- Pigments:** Free sulphur in antimony sulphide —; Estimation of. A. Hutin, 109.
- Pigments:** Oleomargarine and butter; Detection of natural and artificial — in. L. S. Palmer and W. E. Thrun, 278.
- Pipette:** Automatic —. A. Lowy, 321.
- Pipettes:** Alkaline pyrogallol; — especially adapted for use with. R. P. Anderson, 190.
- Pipettes:** Gas analysis; Reagents for use in. III.: Specific absorption of alkaline pyrogallol in various —. R. P. Anderson, 183.
- Plant Enzymes:** Oxidation; Study of —, particularly with relation to. (Test for distinguishing dextrose and lævulose.) A. D. Hall, E. F. Armstrong, H. E. Armstrong, E. Keeble, and E. J. Russell, 249.
- Plant Materials:** Phosphorus in —; Estimation of. A. W. Christie, 247.
- Plants:** Boron: Its absorption and distribution in —, and its effect on growth. F. C. Cook, 137.
- Platinum:** Chloroplatinic acid; Rapid method for converting scrap — into. J. B. Tingle and A. Tingle, 109.
- Platinum:** —, arsenic, gold, selenium, tellurium and molybdenum; Qualitative detection and separation of. P. E. Browning, 84.
- "Poli Oil":** Ghee Indian clarified butter-fat; — a new adulterant of. J. H. Barnes and Arjan Singh, 72.
- Pollution:** Atmospheric —; Committee for the investigation of. First report, April, 1914, to March, 1915. 113.
- Polysulphides:** Lime-sulphur solutions; Separation and estimation of — and thiosulphate in. S. D. Averitt, 288.
- Pomade:** Roman —; Composition of. L. Reutter, 171.
- Potash:** Banana stalks and skins; — in. R. H. Ellis, 211.
- Potash:** Perchlorate and gravimetric cobaltinitrite methods for determination of —. T. D. Jarrell, 83.
- Potassium Dichromate:** Analytical standard: — as an. G. Bruhns, 347.
- Potassium Iodate:** Tin by —; Volumetric estimation of. G. S. Jamieson, 259.
- Potassium:** Other substances; The estimation of — in presence of. A. H. Bennett, 165.
- Potassium Palmitate:** Total hardness (in waters) by —; Estimation of. M. Tilgner, 351.
- Potassium Permanganate:** Cerium by means of —; Volumetric estimation of. V. Lenher and C. C. Meloche, 82.
- Potassium:** Sodium; Separation of — and sodium by the use of aniline perchlorate and the subsequent estimation of the. D. V. Hill, 55.
- Potato:** Carbohydrates in plants; Studies of the formation and translocation of. III.: The carbohydrates of the leaf and leaf-stalks of the —. W. A. Davis and G. C. Sawyer, 94.
- Potato Starch:** Detection of —; Colorimetric method for the. G. Blunck, 312.
- Potatoes:** Starch in raw —; Estimation of. E. Ewers, 136.
- Powders:** Fat in —; A rapid method for the estimation of. S. B. Phillips, 122.
- Powders:** Soap —; Analysis of. L. Rosenberg and V. Lenher, 310.
- Precious or Ornamental Stones:** Gems and — without injury to the specimen; Tables for the determination of. A. J. Moses, 18.
- Precipitants:** Barbituric acid, thiobarbituric acid, and malonylguanidine as quantitative — for furfural; Comparison of. A. W. Dox and G. P. Plaisance, 384.
- Precipitates:** Mechanical means; Washing — by. E. Sinkinson, 390.
- Preserves:** Tomatoes and tomato —; Presence of copper in. G. Liberi, A. Cusmano, T. Marsiglia, and C. Zay, 379.

- President:** Address of the retiring —; Annual. 31.
- Pressure:** Antigens by ultrafiltration, — dialysis, etc., with special reference to diphtheria and tetanus toxins; Detection and concentration of. A. T. Glenny and G. S. Walpole, 137.
- Pressure:** Filtration under reduced —; Apparatus for. J. C. Irvine, 111.
- Pressure:** Ultrafiltration and — dialysis; Collodion membranes for. G. S. Walpole, 152.
- Protein:** Hopkins-Cole Reaction for —. H. G. D. Breidahl, 101.
- Protein Preparations:** Silver in —; Estimation of. H. Wastenson, 349.
- Proteins:** Analysis of —. I.: Estimation of arginine by decomposition with alkali. R. H. A. Plimmer, 285.
- Proteins:** Baking strength; — of wheat flour and their relation to. M. J. Blish, 210.
- Proteoclastic Action:** Taka-diastrase; Optimal conditions for the — of. S. Okada, 281.
- Proteolytic Strength:** Germinated grain in technical analysis; New method of determining the — of: Acid ratio. C. A. Nowak, 10.
- Protozoa:** Soil —; Separation of. N. Kopeloff, H. C. Lint, and D. A. Coleman, 11.
- Prussian Blue:** Spent oxide; Estimation of — in. E. L. Randall, 142.
- Pseudo-Phoenix Vinifera Beccari*: Seed Kernels of —. A. L. van Scherpenberg, 282.
- Pump:** Circulating —; Laboratory. J. S. Morgan, 23.
- Pump:** Vacuum oven; Simple device for regulating — used in exhausting a. G. P. Plaisance and D. V. Moses, 263.
- Pump:** Vacuum —; Automatic. O. Maass, 59.
- Pyrogallol:** Alkaline —; Pipettes especially adapted for use with. R. P. Anderson, 190.
- Pyrogallol:** Gas analysis; Reagents for use in. III.: Specific absorption of alkaline — in various pipettes. R. P. Anderson, 183.
- Quantitative:** Microscopy. T. E. Wallis, 357.
- Rabbits:** Cats and —; Quantitative estimation of morphine in the various organs when injected into. A. W. Homberger and J. C. Munch, 342.
- Radium:** Methods for the determination of —. II.: The emanation method. S. C. Lind, 56.
- Rain:** Nitrogen, chlorine, and sulphates in — and snow. B. Artis, 83.
- Rancid Fats:** Analysis of —. G. Issoglio, 304.
- Reaction:** Urine; New — of. A. Bach, 173.
- Reducing Action:** Phenylhydrazine on certain metallic oxides; — of. E. Puxeddu, 101.
- Reducing Power:** Reducing sugars by Kendall's Solution; Estimation of, and the construction of a table indicating the — of levulose. E. G. Wilson and W. R. G. Atkins, 285.
- Reducing Sugars:** Cane products; Gravimetric estimation of — in. G. P. Meade and J. B. Harris, 247.
- Reducing Sugars:** Cane sugar; Estimation of — in presence of an excess of. L. Maquenne, 179.
- Reducing Sugars:** Carbohydrates; Estimation of —. V.: The supposed precipitation of — by basic lead acetate. W. A. Davis, 382.
- Reducing Sugars:** Kendall's Solution; Estimation of — by, and the construction of a table indicating the reducing power of levulose. E. G. Wilson and W. R. G. Atkins, 285.
- Reducing Sugars:** Urine; New test for — in. W. Cramer, 97.

- Redwood and Ostwald Viscosimeters:** Oils in the —; Viscosity of. C. A. Savill and A. W. Cox, 112.
- Reflux Condensers:** Laboratory —; Comparison of the relative efficiency of. M. V. Dover and J. W. Marden, 352.
- Refractive Indices:** Leamington Spa water; The densities and — of the. C. H. Manley, 267.
- Refractive Indices:** Zeiss Butyro-Refractometer: The conversion of scale-readings to —. C. C. Roberts, 376.
- Report:** Atmospheric pollution; Committee for the investigation of. First —, April, 1914, to March, 1915. 113.
- Report:** Inspectors of foods for the year 1914-1915; — on the work of. A. W. J. MacFadden, 154.
- Report:** Law —. Boric acid in cream. Haigh v. Aerated Bread Company, Limited. 156.
- Report:** Law —. Quality of milk: The feeding of cows. Hunt v. Richardson, 224.
- Reserved Occupations:** Notice of —; Suggested. 26.
- Residuals:** Oil — and natural asphalts; "Formolite" reaction of Nastukoff as applied to. C. Richardson, 212.
- Resin:** *Boswellia Serrata*; Turpentine oil and — of. 8.
- Resinous Woods:** Moisture in —; Estimation of. E. Azzarello, 389.
- Resins:** Hops from various geographic localities; — in. G. A. Russell, 47.
- Respiration Calorimeter:** Man; Improved — for use in experiments with. C. F. Langworthy and R. D. Milner, 49.
- Respiration Calorimeter:** Metabolic activity of small magnitude; —, partly automatic, for the study of. C. F. Langworthy and R. D. Milner, 390.
- Reviews of Books:**
- Bacteriology:** Aids to —. C. G. Moor and W. Partridge, 354.
- Bio-Chemistry:** Organic and —; Practical. R. H. A. Plimmer, 118.
- Carbon Compounds:** Organic chemistry, or the chemistry of the —. V. von Richter, 193.
- Chemical Phenomena:** Surface tension and surface energy, and their influence on —. R. S. Willows and E. Hatschek, 120.
- Chemistry:** Experimental —; A senior. A. E. Dunstan and F. B. Thole, 353.
- Chemistry:** Organic —; Experimental. J. F. Norris, 86.
- Chemistry:** Quantitative —; Representative procedures in. F. A. Gooch, 191.
- Colloid Chemistry:** Handbook of —; A. W. Ostwald (translated by Dr. M. H. Fischer), 353.
- Colloids:** Physics and chemistry of —; An introduction to the. E. Hatschek, 194.
- Fats and Waxes:** Hydrocarbon oils and of saponifiable —; The examination of. D. Holde, 60.
- Flue Gases:** Sampling and analysing —. H. Kreisinger and F. K. Ovitz, 229.
- Food:** Analysis. Typical methods and interpretation of results. A. G. Woodman, 228.
- Food-Supply:** Nutrition; Changes in the — and their relation to. L. B. Mendel, 393.
- Food Values:** —; What they are and how to calculate them. M. McKillop, 355.
- Foods:** Vegetable —; Microscopy of. A. L. Winton, 393.
- Hydrocarbon Oils:** Saponifiable fats and waxes; The examination of — and of. D. Holde, 60.
- Indian Medicinal Substances:** Vocabulary of — and drugs. C. M. Gupta, 326.
- Inks:** —: Their composition and manufacture. C. A. Mitchell and T. C. Hepworth, 229.

Reviews of Books—continued.

- Light:** Theories; — and colour. J. W. Lovibond, 291.
- Manufacturers:** Inorganic chemical products; Technical Chemist's Handbook: Tables and Methods of Analysis for — of. G. Lunge, 396.
- Materia Medica:** Southall's —. E. W. Mann, 265.
- Mineralogy:** Elements of —. F. Rutley, 327.
- Oils:** Manual of —, resins, and paints; A. Vol. I.: Analysis and valuation. H. Ingle, 25.
- Organic Compounds:** Identification of pure —; A method for the. Vol. II. S. P. Mulliken, 392.
- Pharmacognosy:** Scientific and applied —. H. Kraemer, 227.
- Plants:** Water purification — and their operation. M. F. Stein, 158.
- Reattivi (Reagents):** Reazioni (reactions); — e. E. Tognoli, 356.
- Southall's:** Materia Medica. E. W. Mann, 265.
- Surface Energy:** Chemical phenomena; Surface tension and —, and their influence on. R. S. Willows and E. Hatschek, 120.
- Technical Chemist's Handbook:** Inorganic chemical products; —: Tables and Methods of Analysis for manufacturers of. G. Lunge, 396.
- Vinegar:** —; Its manufacture and examination. C. A. Mitchell, 324.
- Volumetric:** Analysis. A. J. Berry, 157.
- Water:** — Purification plants and their operation. M. F. Stein, 158.
- Waxes:** Hydrocarbon oils and of saponifiable fats and —; The examination of. D. Holde, 60.
- Rhamnus Barks:** —; Analysis of. O. Tunmann, 379.
- Rinck's Method:** Methyl alcohol; — for the detection of. G. Fendler, 316.
- Roman Pomade:** Composition of —. L. Reutter, 171.
- Rose's Method:** Pepsin; Modification of — for the estimation of. M. H. Givens, 49.
- Rubber:** Compound; Direct estimation of — in a. R. W. Belfit, 215.
- Rubber:** Vulcanised — goods; Estimation of barium carbonate and barium sulphate in. J. B. Tuttle, 215.
- Rübner's Test:** Dextrose and lactose; Action of normal and basic lead acetate on the sugars, with remarks on — for. H. Rogerson, 102.
- Russian Oak:** Specimen of ancient —; Note on a. P. A. E. Richards, 169.
- Saccharin:** Detection of — and its estimation. M. Klostermann and K. Scholta, 309.
- Safety Valve:** New —. M. S. Losanitch, 223.
- Saffron:** Analysis of —. Pierlot, 278.
- Salicylic Acid:** Para-hydroxybenzoic acid; Note on the melting-point of —, and a test for the presence of. H. L. Smith, 3.
- Salicylic Acid Reaction:** Soya Beans; — of. H. C. Brill, 381.
- Saline Waters:** Iodine and bromine in —; Estimation of. D. F. Papa, 184.
- Salivary Digestion:** Bread; Digestibility of. I.: — *in vitro*. J. C. Blake, 248.
- Salvarsan:** — and neo-salvarsan; Excretion and secretion of. J. Webster, 231.
- Sampling:** Beeswax; — and analysis of. M. S. Salamon, 76.
- Sampling:** Grain, seeds, and other material; Device for —. E. G. Boerner, 154.
- Sausages:** Meats, —, etc.; Detection and estimation of nitrites and nitrates in. D. Acél, 308.
- Scale-Readings:** Zeiss Butyro-Refractometer: The conversion of — to refractive indices. C. C. Roberts, 376.
- Scopolamine:** Atropine, hyoscyamine, and —; Sensitive colour reaction for. R. Wasicky, 45.

- Sea-Water:** Concentration of hydrogen ions in —; Use of solutions of borax and boric acid in the colorimetric estimation of the. S. Palitzsch, 387.
- Seasoning:** Teak wood; Method of estimating the amount of — of. A. C. Sircar, 213.
- Seed Kernels:** *Pseudo-phœnix Vinifera Beccari*; — of. A. L. van Scherpenberg, 282.
- Seed:** *Madia sativa* — and oil.
- Seed:** Wild-grape — (*Vitis riparia*); Oil of the. G. D. Beal and C. K. Beebe, 47.
- Seeds:** Grain, —, and other material; Device for sampling. E. G. Boerner, 154.
- Seeds:** Owere —; Oil from. 8.
- Seeds:** Palms; Some new oil- — derived from American. G. T. Bray and F. L. Elliott, 298.
- Selenium:** Arsenic; Detection of small quantities of —, and its distinction from. J. Meunier, 389.
- Selenium:** Platinum, arsenic, gold, —, tellurium and molybdenum; Qualitative detection and separation of. P. E. Browning, 84.
- Selenium:** Sulphur; Estimation of — in. W. Smith, 21.
- Sesquiterpene Alcohol:** Ginger; Zingiberol: A new — occurring in essential oil of. B. T. Brooks, 90.
- Sewage:** Whipple's Method of estimating organic nitrogen in —; Modification of. F. W. Bruckmiller and L. E. Jackson, 254.
- Shark Liver Oil:** Hydrocarbon in —; Highly unsaturated. M. Tsujimoto, 385.
- Shell:** Ground cocoa; Estimation of — in. R. Wasicky and C. Wimmer, 46.
- Silica:** Estimation of —. V. Lenher and E. Truog, 219.
- Silver Arsenate Test:** Arsenic; Study of the — for. L. J. Curtman and P. Daschavsky, 286.
- Silver Chloride:** Silver in solutions of — in ammonia; Electrolytic estimation of. E. P. Schoch and F. M. Crawford, 350.
- Silver:** Protein preparations; Estimation of — in. H. Wastenson, 349.
- Silver:** Solutions of — chloride in ammonia; Electrolytic estimation of — in. E. P. Schoch and F. M. Crawford, 350.
- Silver:** Vanadic acid after reduction by metallic —; Estimation of. G. Edgar, 290.
- Slag:** Citrate-Soluble phosphoric acid in basic — by the iron citrate method; Estimation of. M. Popp, 186.
- Snow:** Rain and —; Nitrogen, chlorine, and sulphates in. B. Artis, 83.
- Soap:** Detergent action of —; Researches on the. S. A. Shorter, 171.
- Soap:** Free alkali in —; Estimation of. F. H. Newington, 88.
- Soap:** Powders; Analysis of —. L. Rosenberg and V. Lenher, 310.
- Soap:** Solutions; Studies of —. V. Lenher and M. V. R. Buell, 311.
- Society of Public Analysts and Other Analytical Chemists, Proceedings of the,** 2, 31, 70, 87, 121, 159, 195, 231, 267, 294, 334, and 357.
- Sodium Glyceroxide:** Glycerol in oils as —; Estimation of. H. Bull, 343.
- Sodium:** Potassium and — by the use of aniline perchlorate; Separation of, and the subsequent estimation of the —. D. V. Hill, 55.
- Sodium Pyrogallate:** Oxygen; — as reagent for estimation of. J. W. Shipley, 349.
- Soil:** Amino-Acid nitrogen of —. R. S. Potter and R. S. Snyder, 48.
- Soil Analysis:** Mechanical —; Method of. O. Swen, 23.
- Soil:** Nitrates in —; Estimation of. R. S. Potter and R. S. Snyder, 20.
- Soil Protozoa:** —; Separation of. N. Kopeloff, H. C. Lint, and D. A. Coleman, 11.
- Soils:** Phosphates in —; Comparison of methods for estimation of. W. O. Robinson, 187.
- Soils:** Total carbon in —; Rapid method for accurate determination of. R. M. Salter, 282.

- Solutions:** Ferric salt —; Reduction of, and titration of the reduced — with permanganate. A. Hoenig, 54.
- Solutions:** Soap —; Studies of. V. Lenher and M. V. R. Buell, 311.
- South Africa:** Kaffir Corn ("Dari") from —. 8.
- Soya Bean:** Carbohydrates and enzymes of the —. J. P. Street and E. M. Bailey, 9.
- Soya Beans:** Salicylic acid reaction of —. H. C. Brill, 381.
- Soya Beans:** Urease in —; Presence of. T. M. Groll, 140.
- Spent Acids:** Mixed and —; Analysis of. L. Wuyts, 103.
- Spent Oxide:** Prussian blue in —; Estimation of. E. L. Randall, 142.
- Spent Oxide:** Sulphur in —; Estimation of. E. V. Espenhahn, 150.
- Spices:** Analysis of —. C. Arragon, 279.
- Spirit of Peppermint:** Analysis of —. H. J. Thompson, 277.
- Spirit Varnishes:** Methyl and ethyl alcohol in —; Estimation of. G. W. Knight and C. T. Lincoln, 14.
- Spores:** Mould —; Effect of Pasteurisation on. C. Thom and S. H. Ayers, 210.
- Stalk:** Tea; Amount of — in. J. J. B. Deuss, 78.
- Stalks:** Banana — and skins; Potash in. R. H. Ellis, 211.
- Standard:** Analytical —; Potassium dichromate as an. G. Bruhns, 347.
- Standards:** Colorimetric assays; Colour — of. H. V. Army and C. H. Ring, 222.
- Starch:** Potato —; Colorimetric method for the detection of. G. Blunck, 312.
- Starch:** Raw potatoes; Estimation of — in. E. Ewers, 136.
- Starches:** Gelatinising temperature of — by means of a thermo-slide; Determination of the. C. K. Francis and O. C. Smith, 248.
- Stearic Acid:** Butter Fat; Estimation of — in. E. B. Holland, J. C. Reed, and J. P. Buckley, Junr., 209.
- Steel:** Carbon in — by Eggertz Method; Estimation of. H. Le Chatelier and F. Bogitch, 218.
- Steel:** Sulphur in —; Accurate end-point in volumetric estimation of. H. Zschiegner, 220.
- Steels:** Carbon in — and irons by direct combustion in oxygen at high temperatures; Estimation of. J. R. Cain and H. F. Cleaves, 218.
- Stones:** Gems and precious or ornamental — without injury to the specimen; Tables for the determination of. A. J. Moses, 18.
- Strength:** Wheat-flour; Method for the determination of the — and baking qualities of. C. H. Bailey, 134.
- Strontium:** McCrudden's Method for calcium, for estimation of calcium and — in presence of phosphoric acid and a small amount of iron; Modification of. O. B. Winter, 287.
- Subliming:** Iodine; Device for — and weighing small quantities of. G. Fouque, 322.
- Sugar:** Cane —; Action of cupric solutions on. Estimation of invert — in presence of cane —. E. Saillard, 51.
- Sugar:** Cane — and invert — on alkaline copper solutions; Comparative actions of. L. Maquenne, 178.
- Sugar:** Cane — in condensed milk; Estimation of. G. W. Knight and G. Formaněk, 132.
- Sugar:** Crystallisable — by inversion; Yeast preparation for use in the estimation of. H. Pellet, 381.
- Sugar:** Maple products; Analysis of. VIII.: Application of the conductivity and volumetric basic lead acetate tests to maple —. J. F. Snell and G. J. van Zoeren, 208.
- Sugar:** Urine for — with Fehling's Solution; Cause and significance of an abnormal reaction obtained in testing. W. Cramer, 96.

- Sugars:** Cane sugar; Estimation of reducing — in presence of an excess of. L. Maquenne, 179.
- Sugars:** Carbohydrates; Estimation of —. V.: The supposed precipitation of reducing — by basic lead acetate. W. A. Davis, 382.
- Sugars:** Reducing — by Kendall's Solution; Estimation of, and the construction of a table indicating the reducing power of lævulose. E. G. Wilson and W. R. G. Atkins, 285.
- Sugars:** Reducing — in cane products; Gravimetric estimation of. G. P. Meade and J. B. Harris, 247.
- Sugars:** Reducing — other than invert sugar; Presence in industrial — of. L. Maquenne, 180.
- Sugars:** Rübner's Test for dextrose and lactose; Action of normal and basic lead acetate on the —, with remarks on. H. Rogerson, 102.
- Sugars:** Urine; New test for reducing — in. W. Cramer, 97.
- Sulphates:** Rain and snow; Nitrogen, chlorine, and — in. B. Artis, 83.
- Sulphates:** Urine; Volumetric estimation of total sulphur and — in small quantities of. J. C. Drummond, 96.
- Sulphides:** Mixture of alkali —, thiosulphates, and dithionates; Analysis of a. J. A. Muller, 104.
- Sulphides:** Thiosulphates in the presence of —; Titration of, and the estimation of thiosulphates in the presence of sulphites, bisulphites, and —. A. Sander 84.
- Sulphides:** Tin, antimony, and arsenic; Action of magnesium on the — of. C. Pertusi, 19.
- Sulphite:** Thiosulphate in the presence of —; Volumetric estimation of. A. Sander, 320.
- Sulphites:** Thiosulphates in the presence of —, bisulphites, and sulphides; Titration of thiosulphates in the presence of sulphides and the estimation of. A. Sander, 84.
- Sulphur:** Antimony sulphide pigments; Estimation of free — in. A. Hutin, 109.
- Sulphur:** Compounds containing —; Estimation of the methoxy group in. A. Kirpal and T. Bühn, 253.
- Sulphur:** Lime-sulphur solutions by iodine titration; Estimation of thiosulphate — in. P. L. Blumenthal and S. D. Averitt, 350.
- Sulphur:** Selenium in —; Estimation of. W. Smith, 21.
- Sulphur:** Spent oxide; Estimation of — in. E. V. Espenhahn, 150.
- Sulphur:** Steel; Accurate end-point in volumetric estimation of — in. H. Zschiegner, 220.
- Sulphur:** Total — and sulphates in small quantities of urine; Volumetric estimation of. J. C. Drummond, 96.
- Syrup:** Gum in the officinal — of gum; Estimation of. E. Luce, 340.
- Syrups:** Maple products; Analysis of. VI.: Volumetric basic lead acetate test for purity of maple —. J. F. Snell, N. C. MacFarlane, and G. J. van Zoeren, 207.
- Syrups:** Moisture in — by the calcium carbide method; Estimation of. R. M. West, 186.
- Table:** Lævulose; Estimation of reducing sugars by Kendall's Solution, and the construction of a — indicating the reducing power of. E. G. Wilson and W. R. G. Atkins, 285.
- Tables:** Determination of gems and precious or ornamental stones without injury to the specimen; — for the. A. J. Moses, 17.
- Taka-Diastase:** Proteoclastic action of —; Optimal conditions for the. S. Okada, 281.

- Tallow:** Illipé Nuts and the sources of Borneo —. 7.
- Tannin Estimation:** Nickel hydroxide in —; Use of. P. Singh and T. P. Ghose, 102.
- Tannin:** Estimation of —. D. B. Dott, 52.
- Tannin:** Tanning materials; Estimation of — in. A. Gawalowski, 52.
- Tartaric Acid:** Estimation of —. B. G. Hartmann, J. R. Eoff, and M. J. Ingle, 216.
- Tea:** Stalk in —; Amount of. J. J. B. Deuss, 78.
- Teak Wood:** Seasoning of —; Method of estimating the amount of. C. H. Wright, 213.
- Technical Applications:** Casein and its —. D. Marotta, 383.
- Tellurium:** Platinum, arsenic, gold, selenium, — and molybdenum; Qualitative detection and separation of. P. E. Browning, 84.
- Temperature:** Coal ash under fuel-bed conditions; Method and furnace for the determination of the softening — of. A. C. Fieldner and A. L. Field, 16.
- Temperature:** Starches by means of a thermo-slide; Determination of the gelatinising — of. C. K. Francis and O. C. Smith, 248.
- Temperature:** Water in alcohol by means of the critical solution —; Determination of very small quantities of. V. Rodt, 316.
- Temperatures:** Direct combustion in oxygen at high —; Estimation of carbon in steels and irons by. J. R. Cain and H. E. Cleaves, 218.
- Temperatures:** High —; Calorimetric measurements at. S. Tamaru, 110.
- Tertiary Phosphates:** Certain divalent metals in the form of —; On the alkalimetric estimation of, with especial reference to the volumetric determination of cobalt and nickel. W. R. Schoeller and A. R. Powell, 124.
- Tetanus Toxins:** Ultrafiltration, pressure dialysis, etc., with special reference to diphtheria and —; Detection and concentration of antigens by. A. T. Glenny and G. S. Walpole, 137.
- Tetrathionates:** Error in certain iodine titrations; Decomposition of — in alkaline solution as a source of. R. M. Chapin, 150.
- Textiles:** Analysis of —. Pontio, 81.
- Thermo-Slide:** Starches by means of a —; Determination of the gelatinising temperature of. C. K. Francis and O. C. Smith, 248.
- "Thinner":** Oil varnish; Estimation of volatile — in. E. W. Boughton, 318.
- Thiobarbituric Acid:** Barbituric acid, —, and malonylguanidine as quantitative precipitants for furfural; Comparison of. A. W. Dox and G. P. Plaisance, 384.
- Thiocyanates:** Ferro- and ferri-cyanides in the presence of cyanides and —; Estimation of. F. G. W. Knapman and E. L. Randall, 253.
- Thiophen:** Benzene; Estimation of — in. O. Paglini and B. Silbermann, 102.
- Thiosulphate:** Polysulphides and — in lime-sulphur solutions; Separation and estimation of. S. D. Averitt, 288.
- Thiosulphate:** Sulphite; Volumetric estimation of — in the presence of. A. Sander, 320.
- Thiosulphate Sulphur:** Lime-sulphur solutions by iodine titration; Estimation of — in. P. L. Blumenthal and S. D. Averitt, 350.
- Thiosulphates:** Alkali sulphides, —, and dithionates; Analysis of a mixture of. J. A. Muller, 104.
- Thiosulphates:** Sulphides; Titration of — in the presence of, and the estimation of — in the presence of sulphites, bisulphites, and sulphides. A. Sander, 84.
- Thorium:** Ammonium salt of nitrosophenylhydroxylamine ("Cupferron"); The separation of — from iron with the aid of the. W. M. Thornton, Junr., 288.
- Tin Ashes:** Tin in —; Estimation of. N. Welwart, 259.
- Tin:** Canned foods; — in. W. D. Bigelow, 342.

- Tin Group:** Metals of the — in qualitative analysis; Separation of. J. M. Welch and H. C. P. Weber, 258.
- Tin:** Heavy metals from —, antimony, tungsten, and molybdenum by means of the electric current; Use of hydrofluoric acid in separation of some. L. W. McCay and N. H. Furman, 149.
- Tin:** Potassium iodate; Volumetric estimation of — by. G. S. Jamieson, 259.
- Tin:** Sulphides of —, antimony, and arsenic; Action of magnesium on the. C. Pertusi, 19.
- Tin:** — Ashes; Estimation of — in. N. Welwart, 259.
- Tin:** Tungsten by Fieber's Method; Estimation of. Separation of — from tungsten. E. Dittler and A. von Graffenried, 351.
- Titanium Trichloride:** Volumetric analysis; Use of — in. A. Monnier, 260.
- Titration:** Permanganate in strongly alkaline solutions; — with. B. Brauner, 258.
- Titrimetric Method:** Carbon dioxide; Methods for the estimation of. New form of absorption tower adapted to the. E. Torug, 58.
- Tobacco:** Nicotine in — and — extracts; Estimation of. A critical examination of methods. H. B. Rasmussen, 208.
- Toluene:** Benzene and — in commercial mixtures; The estimation of. A. Edwards, 250.
- Toluene:** —; Estimation of. Application of the method to benzene and xylene. H. W. James, 144.
- Tomato Preserves:** Copper in tomatoes and —; Presence of. G. Liberi, A. Cusmano, T. Marsiglia, and C. Zay, 379.
- Toth's Method:** Nicotine by —; Methyl red as an indicator in the estimation of. P. Schick and G. Hatos, 308.
- Tower:** Carbon dioxide; Methods for the estimation of. New form of absorption — adapted to the titrimetric method. E. Torug, 58.
- Town Service Waters:** Free chlorine in —; Detection of. G. A. Le Roy, 182.
- Toxins:** Antigens by ultrafiltration, pressure dialysis, etc., with special reference to diphtheria and tetanus —; Detection and concentration of. A. T. Glenny and G. S. Walpole, 137.
- Translocation:** Carbohydrates in plants; Studies of the formation and — of. I.: The carbohydrates of the mangold leaf, 92.
- Translocation:** Carbohydrates in plants; Studies of the formation and — of. II.: The dextrose-lævulose ratio in the mangold. W. A. Davis, 93.
- Translocation:** Carbohydrates in plants; Studies of the formation and — of. III.: The carbohydrates of the leaf and leaf-stalks of the potato. W. A. Davis and G. C. Sawyer, 94.
- Trichloride:** Arsenic by distillation as —; Reduction of arsenic to the arsenious state by cuprous chloride and estimation of. R. C. Roark and C. C. MacDonnell, 217.
- Trivalent Manganese:** Glass; Note on the identification of — in. S. R. Scholes, 54.
- Tropics:** Specific gravity of fixed oils in the —; Determination of the. C. H. Wright, 213.
- Tungsten:** Detection of —. M. L. Hartman, 320.
- Tungsten:** Fieber's Method; Estimation of — by. Separation of tin from —. —. E. Dittler and A. von Graffenried, 351.
- Tungsten:** Heavy metals from tin, antimony, —, and molybdenum by means of the electric current; Use of hydrofluoric acid in separation of some. L. W. McCay and N. H. Furman, 149.
- Tungsten:** Qualitative and quantitative analysis of —. M. L. Hartman, 289.
- Turpentine Oil:** *Boswellia serrata*; — and resin of. 8.
- Turpentine:** Purity of —; Testing the. A. Krieger, 347.

- Turpentine:** Wood —; Composition of. M. Adams, 9.
- Twig and Bark Oils:** *Coniferae*; Oils of the. *V.*: The leaf and — of Incense Cedar. A. W. Schorger, 177.
- Ultrafiltration:** Antigens by —, pressure dialysis, etc., with special reference to diphtheria and tetanus toxins; Detection and concentration of. A. T. Glenny and G. S. Walpole, 137.
- Ultrafiltration:** Collodion membranes for — and pressure dialysis. G. S. Walpole, 152.
- Unit:** Viscosity measurement; — of. P. C. McIlhiney, 223.
- Unsaturated Hydrocarbon:** Shark liver oil; Highly — in. M. Tsujimoto, 385.
- Unsaturated Hydrocarbons:** Carbon monoxide in mixtures containing —; Direct estimation of. A. Piva, 141.
- Urea:** Urease method; Estimation of — in urine by the. C. H. Fiske, 79.
- Urease Method:** Urea in urine by the —; Estimation of. C. H. Fiske, 79.
- Urease:** Soya beans; Presence of — in. T. M. Groll, 140.
- Uric Acid:** Phenol; New salt of — and its application to the analysis of — and. J. L. Morris, 282.
- Urine:** Abnormal reaction obtained in testing — for sugar with Fehling's Solution; Cause and significance of an. W. Cramer, 96.
- Urine:** Albumin in —; Estimation of. R. Dhommée, 173.
- Urine:** Picric acid in — and viscera; Detection of. E. Kohn-Abrest, 313.
- Urine:** Reaction of —; New. A. Bach, 173.
- Urine:** Reducing sugars in —; New test for. W. Cramer, 97.
- Urine:** Total sulphur and sulphates in small quantities of —; Volumetric estimation of. J. C. Drummond, 96.
- Urine:** Urea in — by the urease method; Estimation of. C. H. Fiske, 79.
- Vacuum Oven:** Pump used in exhausting a —; Simple device for regulating. G. P. Plaisance and D. V. Moses, 263.
- Vacuum Pump:** Automatic —. O. Maass, 59.
- Valve:** Safety —; New. M. S. Losanitch, 223.
- Van Slyke Method:** Amino-acids of feeding-stuffs by the —; Estimation of the. H. S. Grindley and M. E. Slater, 46.
- Vanadic Acid:** Metallic silver; Estimation of — after reduction by. G. Edgar, 290.
- Vanadium:** "Cupferron"; Estimation of — by. W. A. Turner, 261.
- Vanadium:** Electrometric titration of —. H. L. Kelley and J. B. Conant, 108.
- Vanilla:** Vanillin in —; Colorimetric determination of. T. von Fellenberg, 280.
- Vanillin:** Vanilla; Colorimetric determination of — in. T. von Fellenberg, 280.
- Vapour Apparatus:** Burrell's —; Estimation of benzol in coke-oven gas by. L. C. Whiton, 313.
- Vapour Densities:** Comparative Method for determining —. P. Blackman, 24.
- Varnish:** — Analysis. I.: Molecular weights of vegetable oils. M. Y. Seaton and G. B. Sawyer, 254.
- Varnish:** Volatile "thinner" in oil —; Estimation of. E. W. Boughton, 318.
- Varnishes:** Methyl and ethyl alcohol in spirit —; Estimation of. G. W. Knight and C. T. Lincoln, 14.
- Vegetable Oils:** Molecular weights of certain —. H. J. Backer, 47.
- Vegetable Oils:** Phytosterol in —; Estimation of. M. Klostermann and H. Opitz, 317.
- Vegetable Oils:** Varnish Analysis. I.: Molecular weights of —. M. Y. Seaton and G. B. Sawyer, 254.

- Vegetable Parchments:** Analysing.—; Methods of. R. W. Sindall and W. Bacon, 101.
- Velocity:** Organic acids; Distribution co-efficients and — of extraction of certain. J. Pinnow, 80.
- Vermouth:** Essential oils (essences) in —; Estimation of. L. Ronnet, 306.
- Vermouth:** Essential oils in —; Estimation of. X. Rocques, 89.
- Vine:** Fruit of the Canadian —; Oil from the. S. Fachini and G. Dorta, 309.
- Vinegar:** Wine and —; Use of the Iodic Acid-Starch Reaction in the examination of. J. Jaenpretre, 379.
- Viscera:** Picric acid in urine and —; Detection of. E. Kohn-Abrest, 313.
- Viscosimeters:** Oils in the Redwood and Ostwald —; Viscosity of. C. A. Savill and A. W. Cox, 112.
- Viscosimeter:** Direct-Reading —. R. F. MacMichael, 24.
- Viscosimeter:** New form of —. H. C. Hayes and G. W. Lewis, 391.
- Viscosity:** Oils in the Redwood and Ostwald Viscosimeters; — of. C. A. Savill and A. W. Cox, 112.
- Viscosity:** Measurement; Sources of error in —. E. C. Bingham, H. I. Schlesinger, and A. B. Coleman, 85.
- Viscosity:** Measurement; Unit of —. P. C. McIlhiney, 223.
- (*Vitis riparia*): Wild-grape seed —; Oil of the. G. D. Beal and C. K. Beebe, 47.
- Volatile Oil:** *Calycanthus occidentalis*: — of. C. C. Scalione, 309.
- Volatile Oil:** *Euthamia Caroliana (L.) Greene*; — of. G. A. Russell, 281.
- Volatile "Thinner":** Oil varnish; Estimation of — in. E. W. Boughton, 318.
- Volumetric Analysis:** Titanium trichloride in —; Use of. A. Monnier, 260.
- Volumetric and Conductivity Basic Lead Acetate Tests:** Maple products; Analysis of. VIII.: Application of the — to maple sugar. J. F. Snell and G. J. van Zoeren, 208.
- Vulcanised Rubber Goods:** Barium carbonate and barium sulphate in —; Estimation of. J. B. Tuttle, 215.
- Wash-Bottle:** Non-Spattering —. F. C. Clapp, 323.
- Washing:** Precipitates by mechanical means. E. Sinkinson, 390.
- Water:** Analysis. L. W. Winkler, 151.
- Water Analysis:** Required oxygen [in —]; Comparison of the permanganate methods for the estimation of. J. H. Sachs, 221.
- Water:** *Bacillus sporogenes* in milk and —; Simple test for. J. Weinziel, 48.
- Water:** Coal; Some properties of the — in. H. C. Porter and O. C. Ralston, 314.
- Water:** Critical solution temperature; Determination of very small quantities of — in alcohol by means of the. V. Rodt, 316.
- Water:** Dissolved oxygen in —; Estimation of. J. Miller, 222.
- Water:** Ether; Estimation of small amounts of alcohol and — in. E. Malinckrodt and A. D. Alt, 342.
- Water:** Leamington Spa —; The densities and refractive indices of the. C. H. Manley, 267.
- Water:** Phosphoric acid, especially in —; Detection and estimation of very small amounts of. P. Medinger, 20.
- Water-Vapour:** Air, —, and nitrous oxide in mixtures of these three constituents; Estimation of. G. A. Burrell and G. W. Jones, 318.
- Waters:** Calcium and magnesium in natural —; Estimation of. S. A. Kay and S. H. Newlands, 221.
- Waters:** Carbonic acid, combined and free, in solution, particularly in natural —; Estimation of. J. Johnston, 255.

- Waters:** Gases dissolved in — and effluents; Estimation of. A. A. Swanson and G. A. Hulett, 17.
- Waters:** Hardness of natural —; Estimation of, and the use of methyl red as an indicator. S. A. Kay and S. H. Newlands, 220.
- Waters:** Saline —; Estimation of iodine and bromine in. D. E. Popa, 184.
- Waters:** Total hardness (in —) by potassium palmitate; Estimation of. M. Tilgner, 351.
- Waters:** Town service —; Detection of free chlorine in. G. A. Le Roy, 182.
- Waxes:** Beeswax and wool-wax; Analysis of —, with special reference to. F. W. Richardson and G. A. Bracewell, 89.
- Weighing:** Iodine; Device for subliming and — small quantities of. G. Fouque, 322.
- Weights:** International Atomic —; 1916. 1.
- Wheat-Flour:** Strength and baking qualities of —; Method for the determination of the. C. H. Bailey, 134.
- Wheat:** Proteins of — flour and their relation to baking strength. M. J. Blish, 210.
- Whipple's Method:** Organic nitrogen in sewage; Modification of — of estimating. F. W. Bruckmiller and L. E. Jackson, 254.
- Whole Milk:** Fat content of dried —; Estimation of the. K. Mohs, 378.
- Wild-Grape Seed:** Oil of the — (*Vitis riparia*). G. D. Beal and C. K. Beebe, 47.
- Wine:** Iodic Acid-Starch Reaction in the examination of — and vinegar; Use of the. J. Jaenpretre, 379.
- Wines:** Artificial colours in —; Detection of. H. Kreis, 380.
- Wood Oil:** Chinese —; Adulteration of. J. C. Brier, 13.
- Wood:** Seasoning of teak —; Method of estimating the amount of. A. C. Sircar, 213.
- Wood Turpentine:** Composition of —. M. Adams, 9.
- Woods:** Moisture in resinous —; Estimation of. E. Azzarello, 389.
- Wool-Wax:** Waxes, with special reference to beeswax and —; Analysis of. F. W. Richardson and G. A. Bracewell, 89.
- Xylene:** Toluene; Estimation of. Application of the method to benzene and —. H. W. James, 144.
- Yeast:** Milk and butter; The effect of feeding on the composition of: Dried — and decorticated cotton meal. H. T. Cranfield and M. G. D. Taylor, 240.
- Yeast Preparation:** Crystallisable sugar by inversion; — for use in the estimation of. H. Pellet, 381.
- Yeasts:** Enzymes and special — in carbohydrate analysis; Use of. W. A. Davis, 138.
- Yttrium:** Erbium from —; Separation of. P. S. Willand and C. James, 257.
- Zeiss Butyro-Refractometer:** Refractive indices; —: The conversion of scale readings to. C. C. Roberts, 376.
- Zinc:** Cadmium and —; Volumetric estimation of. H. Enell, 82.
- Zinc:** Electrolysis; Estimation of — by. F. Chancel, 187.
- Zingiberol:** Essential oil of ginger; —: A new sesquiterpene alcohol occurring B. T. Brooks, 90.