

INDEX TO VOLUME XLVII.

INDEX TO NAMES.

A

- Adams, E. T.** See Hammett, F. S., and Adams, E. T.
Adams, R. Organic Syntheses. Vol. I. (Review), 187.
Adams, R. See Vorhees, V., and Adams, R.
Agcasili, F. See Wells, A. H., Agcasili, F., and Feliciano, R. T.
Aitchison, L. See Ibbotson, F., and Aitchison, L.
Ajon, G. Adulteration of oil of lemon with terpenes, 521.
Ajon, G. Critical solution temperature of oil of lemon, 172.
Allison, V. C., Parker, W. L., and Jones, G. W. Estimation of oxides of nitrogen, 182.
Almy, L. H., and Field, E. Preservation of fish frozen in chilled brine, 306.
Amberger, C., and Bromig, K. Glycerides of goose-fat, 75.
Amberger, K. Detection of foreign starch in meal, 73.
Amberger, K. See Wirthle, F., and Amberger, K.
Anderson, J. A. See Fred, E. B., Peterson, W. H., and Anderson, J. A.
Ando, K. See Osaka, Y., and Ando, K.
Andrews, F. M. J. See Small, J., and Andrews, F. M. J.
Angenot, H. Electrolytic estimation of anti-mony, 136.
Annett, H. E., and Bose, M. N. The estimation of meconic acid in opium, 387.
Annett, H. E., and Singh, H. D. Loss of morphine on storage of powdered opium, 522.
Arnaud, F. W. F. Report of the Kent County Analyst for the Quarter ended September 30, 1921, 68.
Arnaud, F. W. F. Report of the Kent County Analyst under the Fertilisers and Feeding Stuffs Act for the Quarter ended September 30, 1921, 69.
Arpin, —, and Pecaud, M. T. Estimation of the acidity of flour, 516.
Arreguine, V., junr., and Garcia, E. D. Colour reaction for urea, 309.
Astruc, A., Canals, E., and Bordier, R. Estimation of the alkaloids in aconite extract, 212.
Atkin, W. R. Analysis of commercial sodium sulphide, 453.
Aubry, P. Detection of bismuth in urine, 129.

- Azadian, A.** Composition of Taamya (an Egyptian food) 478.,
Azadian, A. Estimation of caffeine by means of silicotungstic acid, 172.
Azadian, A. Fat obtained from Egyptian goats' milk, 352.

B

- Bacho, F. De.** Estimation of hydrosulphurous and sulphoxylic acids, 184.
Bacho, F. De. Iodimetric estimation of hydrosulphurous and sulphoxylic acids, 369.
Bailey, A. See Taylor, W. C., and Bailey, A.
Bailey, C. H., and Weigley, M. Loss of carbon dioxide from dough as an index of flour strength, 258.
Bailey, E. M. Casein and calcium caseinate, 519.
Bailey, E. M. Cryoscopy of milk, 519.
Bailey, E. M. Foods for diabetics, 517.
Baillie, W. L., and Wilson, F. E. Autoclave test for the grading of chemical glassware, 226.
Baker, H. B. Change of properties of substances on drying, 321.
Balarew, D. Estimation of zinc as pyrophosphate, 91.
Balarew, D. Qualitative tests for pyrophosphoric acid in the presence of ortho- and meta-phosphoric acids, 39.
Baralew, D. Reaction of manganese, iron and cobalt, 36.
Barlot, J., and Brenet, M. T. (Mdlle.) Characterisation of fatty acids by the formation of complexes with uranyl and sodium, 132.
Barnett, E. De B. Organic Analysis, Qualitative and Quantitative (Review), 230.
Barry, F. Maintenance of the adiabatic condition in calorimetry, 324.
Batta, G., and Thyssen, H. Estimation of carbon in cast iron and steel by Corleis' method, 271.
Baudisch, O., and Deuel, H. J. New test for carbohydrates, 399.
Baudisch, O. See Deuel, H. J., and Baudisch, O.
Baudisch, O. See also Johnson, T. B., and Baudisch, O.
Bauer, K. H. Perilla oil, 401.
Baughmann, W. F., and Jamieson, G. S. Composition of maize oil, 171.

- Becker, J. E.** See McCollum, E. V., Simmonds, N., Becker, J. E., and Shipley, P. G.
- Beckmann, E., and Lehmann, F.** Removal of bitter substances from lupinus, 361.
- Behre, A., and During, A.** Estimation of sucrose in the presence of other carbohydrates by means of alkaline earth hydroxides, 478.
- Bellis, B.** See Supplee, G. C., and Bellis, B.
- Benirschke, F.** See Zielstorff, W., and Benirschke, F.
- Bennett, A. H.** An adulterant of liquorice paste (Notes), 511.
- Bennett, A. H., and Donovan, F. K.** The estimation of aldehydes and ketones by means of hydroxylamine, 146.
- Benedict, S. R., and Franke, E.** Direct estimation of uric acid in urine, 404.
- Bennett, C. T.** Powdered cinnamon bark, 353.
- Bergein, O.** See Hawk, P. B., Smith, C. A., and Bergein, O.
- Berglund, H.** See Folin, O., and Berglund, H.
- Beyer, G. F.** Estimation of esters in imitation flavouring extracts, 302.
- Bishop, E. R., Kittredge, E. B., and Hildebrand, J. H.** Titrations in ethyl alcohol as solvent, 220.
- Black, O. F., and Kelly, J. W.** Oil from the seeds of "Samuela Carnerosana," 400.
- Blair, E. W.** See Wheeler, T. S., and Blair, E. W.
- Blanc, L. G.** See François, M., and Blanc, L. G.
- Blyth, A. W., and Blyth, M. W.** Poisons: Their Effects and Detection (Review), 189.
- Blyth, M. W.** See Blyth, A. W., and Blyth, M. W.
- Bolton, E. R., and Hewer, D. G.** "Certain tropical oilseeds," 282.
- Bömer, A., and Merten, H.** Glycerides of goose fat, 260.
- Bonino, G. B.** Action of potassium ferrocyanide on silver halides, 39.
- Bordier, R.** See Astruc, A., Canals, E., and Bordier, R.
- Bose, M. N.** See Annett, H. E., and Bose, M. N.
- Bougault, J., and Gros, R.** New analytical applications of Nessler's reagent.—Detection of ketones; estimation of aldehydes, 405.
- Bougault, J., and Gros, R.** Presence of acetone in commercial ammonia, 483.
- Bouillot, J.** Acid methylarsinate of strychnine, 213.
- Bogue, R. H.** Evaluation of gelatin and glue, 364.
- Bradford, S. C.** Improvised electric thermostat constant to 0.02°C., 272.
- Brauer, K.** Absorption of water by hardened fats, 480.
- Bray, M. W., and Staidl, J. A.** Chemical changes involved during infection and decay of wood and wood pulp, 175.
- Breisch, K.** See Chalupny, K., and Breisch, K.
- Brenet, M. T. (Mdle.)** See Barlot, J., and Brenet, M. T. (Mdle.)
- Briggs, A. P.** Colorimetric estimation of homogentisic acid in urine, 310.
- Briggs, A. P.** Colorimetric method for the estimation of small amounts of magnesium, 409.
- Brill, H. C., and Brown, R. E.** Digestive properties of Philippine papain, 444.
- Britton, H. T. S.** The separation of aluminium from beryllium. Part III., 50.
- Brock, L. V.** Milk and Dairies (Amendment) Act, 1922, 436.
- Bromig, K.** See Amberger, C., and Bromig, K.
- Brown, A. L.** New quantitative method for the estimation of iron in blood, 217.
- Brown, R. E.** See Brill, H. C., and Brown, R. E.
- Bruce, A.** A tropical milk supply, 288.
- Bruni, G., and Pelizzola, C.** Presence of manganese in raw caoutchouc and the origin of tackiness, 34.
- Budnikov, P. P., and Krauze, K. E.** Estimation of sulphides by oxidation with ferric sulphate, 492.
- Buell, H. D.** Test for uranium, 491.
- Burns, D.** An Introduction to Biophysics (Review), 41.
- Bushill, J. H.** See Ling, A. R., and Bushill, J. H.
- Buston, H. W., and Schryver, S. B.** Separation of amino-acids from the products of hydrolysis of proteins, etc., 264.

C

- Cain, J. R., and Hostetter, J. C.** Co-Precipitation of vanadic acid with ammonium phosphomolybdate, 184.
- Cake, T. E.** See Willard, H. H., and Cake, T. E.
- Callan, T., and Henderson, J. A. R.** Estimation of the nitro group in aromatic organic compounds, 363.
- Callan, T., and Henderson, J. A. R.** Use of potassium bromate in volumetric organic analysis, 362.
- Campbell, A. F.** Separation of *m*- and *p*-cresols from coal-tar crude carbolic acid, 451.
- Campbell, H. L.** See Sherman, H. C., LaMer, V. K., and Campbell, H. L.
- Canals, E.** See Astruc, A., Canals, E., and Bordier, R.
- Carlton, C. A.** Symmetrical diphenyl-guanidine as a standard in acidimetry and alkalimetry, 408.
- Carozzi, E.** See Losana, L., and Carozzi, E.
- Carpentier, G.** See Thomas, P., and Carpentier, G.
- Carozzi, E.** See Losana, L., and Carozzi, E.
- Carr, F. H.** Demonstration of the use of a universal indicator, 196
- Carr, R. H.** See Showalter, M. F., and Carr, R. H.
- Carré, M. H., and Haynes, D.** Estimation of pectin as calcium pectate, 263.
- Carus, M.** Separation of iron and manganese, 92.
- Cathcart, G. P.** The Physiology of Protein Metabolism (Review), 96.
- Chalupny, K., and Breisch, K.** Estimation of magnesium in commercial nickel, 136.

- Chalupny, K., and Breisch, K.** Separation of aluminium and iron by means of *o*-phenetidine, 491.
- Chamot, E. M.** Elementary Chemical Microscopy (Review), 230.
- Chapman, A. C.** Note on the examination of foods for the presence of sulphides, 204.
- Chapman, A. C.** Note on the liver oil of the tope, 203.
- Charpy, G., and Decorps, G.** Determination of the degree of oxidation of coal, 40.
- Charriou, —.** Separation of ferric oxide and alumina from lime by the nitrate method, 271.
- Chater, —, and Woodroffe, —.** Estimation of water-soluble matter in vegetable-tanned leathers, 488.
- Chaudratreya, V. L.** See Winch, H. J., and Chaudratreya, V. L.
- Chervet, D.** See Treadwell, W. D., and Chervet, D.
- Chesnut, V. K.** See Power, F. B., and Chesnut, V. K.
- Chiò, F.** Volumetric estimation of sulphur in burnt pyrites, 38.
- Chouchak, D.** Colorimetric estimation of arsenic by means of quinine molybdate, 317.
- Christin, P.** See Wenger, P., and Christin, P.
- Claremont, C. L.** Notes on the analysis and use of red squill in rat poisons, 60.
- Clark, C. H. D., and Tatham, G. T. P.** Apparatus for stirring waterbath, 412.
- Clark, E. P.** Method for preparing raffinose, 211.
- Clarke, A.** Coal-Tar Colours in the Decorative Industries (Review), 457.
- Claus, R.** See Prescher, J., and Claus, R.
- Clausen, S. W.** Estimation of small amounts of lactic acid, 363.
- Clevenger, J. F.** *Zamia* starch, 170.
- Clifford, W. M.** Distribution of carnosine in the animal kingdom, 266.
- Clifford, W. M.** Effect of cold storage upon the carnosine content of meat, 443.
- Cocks, L. V., and Salway, A. H.** Estimation of trimethyleneglycol in crude glycerin, 131.
- Cofman-Nicoresiti, J.** Solubility of phenol in liquid paraffin, 260.
- Cohen, A.** Use of mixed indicators, 489.
- Cohen, A.** Xylenol Blue as an indicator in chemical and biochemical work, 269.
- Cole, M. J.** See Cross, M. I., and Cole, M. J.
- Coller, F. H.** Statutory Rules and Orders, 1921, No. 1883. Food Control, 71.
- Collins, S. H.** Estimation of laevulose in oat straw, 210.
- Comber, N.** Characterisation of clay, 219.
- Congdon, L. A., and Ingersoll, H. R.** Influence of dextrose on the dialysis of sucrose through a parchment membrane, 170.
- Congdon, L. A., and Stewart, C. R.** Test for sucrose in the presence of dextrose, 123.
- Cook, F. C.** Absorption of copper from the soil by potato plants, 84.
- Cornog, J.** Preparation of sodium hydroxide solution free from carbon dioxide, 181.
- Cornubert, R.** Dictionnaire Anglais-Français-Allemand de Mots et Locutions Intéressant la Physique et la Chimie (Review), 278.
- Coss, R. W.** "Fusaria" rots of the potato, 32.
- Costa, D.** Pyrethrum powder, 260, 403.
- Costa-Vet, E. M. Da.** Analysis of aluminium alloys and especially of duralumin, 368.
- Costy, P.** See Goris, A., and Costy, P.
- Cowlishaw, G. E.** See Pickering, G. F., and Cowlishaw, G. E.
- Crawford, A.** See Sayce, L. A., and Crawford, A.
- Cross, M. I., and Cole, M. J.** Modern Microscopy (Review), 415.
- Csonka, F. A., and Taggart, G. C.** Comparison of the Benedict and Folin-Wu methods for blood sugar estimations, 528.
- Cumming, W. M.** Apparatus for the estimation of methoxyl groups, 131.
- Curtmann, L. J.** Apparatus of transparent bakelite for measuring hydrofluoric acid, 492.

D

- Dahlberg, A. O., and Gardner, H. S.** Alcohol test for grading milk, 25.
- Damon, S. R.** Bacteria as a source of water-soluble B vitamin, 81.
- Davies, E. C., and Grier, J.** Isolation, assay and properties of colchicine, 523.
- Dawson, G. D.** See Young, W. A., and Dawson, G. D.
- De Bacho, F.** Estimation of hydrosulphurous and sulphoxylic acids, 184.
- Decorps, G.** See Charpy, G., and Decorps, G.
- Denigès, G.** Test-Paper for the detection of acetylene, 33.
- Denigès, G., and Tourrou, R.** Microchemical reactions of dulcin (*p*-phenetolecarbamide), 79.
- Desch, C. H.** Metallography (Review), 496.
- Deuel, H. J., and Baudisch, O.** Detection of thymine in the presence of sugar, 399.
- Deuel, H. J.** See Baudisch, O., and Deuel, H. J.
- Deuel, H. J., junr.** See Langworthy, C. F., and Deuel, H. J., junr.
- Dickson, W., and Easterbrook, W. C.** The quantitative separation of nitro-body mixtures from nitro-glycerin, 112.
- Dodd, A. H.** Estimation of guanidine, 310.
- Donovan, F. K.** See Bennett, A. H., and Donovan, F. K.
- Doucet, A.** See Luce, E., and Doucet, A.
- Downs, P. A.** See Supplee, G. C., Whiting, W. A., and Downs, P. A.
- Drakeley, T. J., and Smith, F. W.** Ultimate composition of British coals, 180.
- Drummond, J. C., and Watson, A. F.** The sulphuric acid reaction for liver oils, 341.
- Drummond, J. C., and Watson, A. F.** The testing of foodstuffs for vitamins, 235.
- Drummond, J. C., and Zilva, S. S.** Nutritive value of edible oils and fats. Oil-bearing seeds and crude vegetable oils and fats, 306.
- Drummond, J. C., and Zilva, S. S. Da.** Preparation of cod liver oil and its effect upon the vitamin content, 445.

Dubovitz, H. Preparation of alcohol remaining clear with alkali hydroxide, 447.
Duchoň, F. See Němec, A., and Duchoň, F.
Dunn, J. T. Boric acid in cakes (Notes), 117.
Dupont, G. Aleppo oil of turpentine, 177.
Durgin, C. B. See Ross, W. H., Durgin, C. B., and Jones, R. M.
Düring, A. See Behre, A., and Düring, A.
Dutcher, R. A. See Kennedy, C., and Dutcher, R. A.
Duysen, —. See Schmidt, E., and Duysen, —.
Dyer, J. W. W., and Watson, A. R. Estimation of sulphur in vulcanised rubber, 448.
Easterbrook, W. C. See Dickson, W., and Easterbrook, W. C.

E

Eaton, E. O. Estimation of monobrom-camphor, 173.
Eck, P. N. Van. Detection of blood, 528.
Eckhart, H. Bone fat and neats' foot oil, 521.
Eddy, W. H. The Vitamine Manual: A Presentation of Essential Data about the New Food Factors (Review), 97.
Edgar, G., and Purdum, R. B. Apparatus for rapid electrolysis without rotating electrodes, 371.
Edgar, G. See Lamb, A. R., Scalione, C. C., and Edgar, G.
Eldridge, E. F. See Ewing, D. T., and Eldridge, E. F.
Elsdon, G. D., and Smith, P. Nitrates in milk (Note), 18.
Elsdon, G. D. See Evers, N., and Elsdon, G. D.
Elvoe, E. Estimation of sulphate in neosphenamine, 481.
England, E. H. See Richmond, H. D., and England, E. H.
Englis, D. T., and Tsang, C. Y. Clarification of solutions containing reducing sugars by means of basic lead acetate. Effect of different agents for removing lead, 301.
Entat, M., and Vulquin, E. Detection and estimation of free sulphuric acid and sulphoacetates in cellulose acetates, 312.
Eppley, M., and Vosburgh, W. C. Electrometric titration of dichromate with ferrous sulphate, 537.
Escales, R., and Schlesinger, F. Artificial edible fats, 171.
Essery, R. E. The value of fish-scales as a means of identification of the fish used in manufactured products, 163.
Evans, B. S. The estimation of small quantities of antimony in copper and brass, 1.
Evers, E. W. See Kelley, G. L., and Evers, E. W.
Evers, N., and Elsdon, G. D. The examination of B.P. ointments, 197.
Evers, N. See also Lizius, J. L., and Evers, N.
Ewing, D. T., and Eldridge, E. F. Electrometric titration of uranium with potassium permanganate and potassium dichromate, 409.

F

Fabre, R. A reaction of veronal and hypnotic derivatives of barbituric acid and its applications, 523.
Fairbrother, T. H., and Renshaw, A. Relation between chemical constitution and antiseptic action in the coal tar dyestuffs, 307.
Falcicola, P. Detection of the nitrous anion, 492.
Fales, H. A., and Morell, J. C. New type of sodium lamp for polarimetry, 40.
Fales, H. L. Composition of camel's colostrum, 483.
Faragher, W. F., Gruse, W. A., and Garner, F. H. Iodine values of unsaturated hydrocarbons and cracked gasolines, 86.
Farwell, O. A. "Osyris Alba" as substitute for "Scoparius" N.F., 354.
Feder, E. Composition of meat products, especially of those rich in water, 300.
Feliciano, R. T. See Wells, A. H., Agcasili, F., and Feliciano, R. T.
Fenton, H. J. H. Notes on Qualitative Analysis [Supplement] (Review), 493.
Ferré, L. De-Acetication [Dépiquage] of wines, 401.
Field, E. See Almy, L. H., and Field, E.
Fieldner, A. C., Selvig, W. A., and Parker, W. L. Comparison of the standard gas furnace and micropyrometer methods for determining the fusibility of coal ash, 449.
Fieldner, A. C., Katz, S. H., and Longfellow, E. S. The sugar tube method of estimating rock dust in air, 272.
Fillon, R. See Hinard, G., and Fillon, R.
Fischer, M. H., and Others. Soaps and Proteins: Their Colloid Chemistry in Theory and Practice (Review), 329.
Fisher, H. L., Gray, H., and Merling, R. The tetrabromide method for estimating rubber hydrocarbon, 87.
Fleming, W. D. Estimation of vitamin content of rice by the yeast method, 81.
Fleury, P., and Poirot, G. Colorimetric method for estimating small quantities of furfural, 448.
Foix, A. Determination of molecular weights by means of osmotic pressure, 454.
Foix, A. See Müller, J. A., and Foix, A.
Folin, O. Colorimetric estimation of amino-acid nitrogen in blood, 309.
Folin, O. Colorimetric estimation of amino-acid nitrogen in normal urine, 309.
Folin, O., and Berglund, H. Colorimetric method for the estimation of sugar in normal human urine, 268.
Folin, O., and Looney, J. M. Colorimetric estimation of tyrosine, tryptophane and cystine in proteins, 359.
Fouk, C. W., and Morris, S. Comparative values of different specimens of iodine for use in chemical measurements, 223.
Fox, J. J., and Gauge, A. J. H. Estimation of tar acids and tar bases in road drainage and mud, 406.
Fox, N. T. Lead in self-raising flour (Notes), 468.

- François, M.** Estimation of mercury in mercurial pills, 28.
- François, M., and Blanc, L. G.** Method for the preparation of crystalline iodobismuthates of alkaloids, 440.
- François, M., and Blanc, L. G.** Method for the preparation of crystalline iodomercuriates of alkaloids, 440.
- François, M., and Lormand, C.** Photomicrography of opaque crystals, 94.
- François, M., and Lormand, C.** Stereoscopic photomicrography of crystals, 94.
- Franke, E.** See Benedict, S. R., and Franke, E.
- Franzeri, H., and Schneider, A.** Separation of aliphatic amines from each other and from ammonia, 308.
- Fred, E. B., Peterson, W. H., and Anderson, J. A.** Characteristics of certain pentose-fermenting bacteria, 82.
- Fred, E. B.** See Peterson, W. H., Fred, E. B., and Schmidt, E. G.
- Fresenius, W., and Grünhut, L.** Estimation of tannins and pigments in wine, 26.
- Friedberg, E.** Quantitative estimation of the duration of caffeine excretion in man, 174.
- Froboese, K.** See Froboese, V., and Froboese, K.
- Froboese, V.** Leather substitutes and their examination, 88.
- Froboese, V., and Froboese, K.** Estimation of aluminium in tungsten, 225.
- Froidevaux, J.** Estimation of ammoniacal nitrogen in nitrogenous organic substances, especially in protein materials and their decomposition products, 308.
- G**
- Gabriel, —.** Adulterated chestnut product, 478.
- Gailey, Z. J.** See Tartar, H. V., and Gailey, Z. J.
- Galibourg, —.** Identification of steels by means of the contact E.M.F., 183.
- Garcia, E. D.** See Arreguine, V., junr., and Garcia, E. D.
- Gardner, H. S.** See Dahlberg, A. O., and Gardner, H. S.
- Garner, F. H.** See Faragher, W. F., Gruse, W. A., and Garner, F. H.
- Gauge, A. J. H.** See Fox, J. J., and Gauge, A. J. H.
- Gehring, A.** Estimation of humus by means of chromic acid, 361.
- Geith, R.** Electrolytic estimation of sodium in aluminium and alumina, 452.
- Gerum, J., and Weizenkleber, C.** Wheat gluten, 477.
- Ghose, S. N.** Vitamin content of some Indian foodstuffs, 267.
- Gildemeister, E., and Fr. Hoffmann.** The Volatile Oils (Review), 542.
- Gillespie, L. J.** See Keyes, F. G., Gillespie, L. J., and Mitsukuri, S.
- Glasstone, S.** Direct iodimetric estimation of lead peroxide, 90.
- Gobert, L.** An adulteration of ground coffee, 210.
- Goodson, J. A.** Dakamballi starch (Notes), 205.
- Gore, S. N.** The "cotton-wool plug test" for indole, 307.
- Goris, A., and Costy, P.** Alkaloids contained in extract of belladonna, 522.
- Goris, A., and Costy, P.** Preparation and racemisation of hyoscyamine and its sulphate, 522.
- Goris, A., and Costy, P.** Urease and urea in fungi, 527.
- Goris, A., and Larsonneau, A.** Chemical composition of belladonna leaves, 303.
- Graham, J. J. T., and Smith, C. M.** Errors caused by nitrates and nitrites in the estimation of arsenic by the distillation method, and a means for their prevention, 318.
- Grandchamp, L.** See Malvezin, P., Rivalland, C., and Grandchamp, L.
- Grasser, G.** Analysis in tanning chemistry, 132.
- Gray, H.** See Fisher, H. L., Gray, H., and Merling, R.
- Greaves, J. E., and Hirst, C. T.** Soil solutions, 312.
- Greer, F. E.** See Heyl, F. W., and Greer, F. E.
- Greger, J.** The seeds and fruit of certain field-weeds, 487.
- Griebel, C.** Composition of emmenagogues and similar preparations, 441.
- Grier, J.** See Davies, E. C., and Grier, J.
- Grigaut, —.** Colorimetric estimation of uric acid in blood, 83.
- Griggs, M. A.** Alkaline hydrolysis of casein, 73.
- Grindley, H. S.** See Hamilton, T. S., Nevens, W. B., and Grindley, H. S.
- Groom, S. H.** The application of artificial daylight to laboratory purposes (Sheringham System), 419.
- Gros, R.** See Bougault, J., and Gros, R.
- Grossfeld, J.** Estimation of starch in sausage, 74.
- Gruse, W. A.** See Faragher, W. F., Gruse, W. A., and Garner, F. H.
- Guerbet, M.** Identification of the colouring matter of saffron, 481.
- Guillaumin, A. J. A.** See Simon, L. J., and Guillaumin, A. J. A.
- H**
- Hackl, O.** Detection and estimation of nickel and cobalt in silicate rocks, 319.
- Hackl, O.** Estimation of minute traces of arsenic in silicate rocks, 135.
- Haehn, H.** Coloration of potato juice, 527.
- Haferkorn, P.** Test for antimony, 224.
- Haley, D. E., and Lyman, J. F.** Castor bean lipase. Its preparation and some of its properties, 173.
- Hall, D.** Estimation of small amounts of molybdenum in tungsten, 409.
- Hall, D.** See Willard, H. H., and Hall, D.

- Hamilton, T. S., Nevens, W. B., and Grindley, H. S.** Estimation of amino acids in food-stuffs, 33.
- Hammitt, F. S., and Adams, E. T.** Colorimetric estimation of magnesium in small amounts, 368.
- Hanak, A.** Estimation of sugar by titration with alkali hydroxide of the cuprous oxide obtained from Fehling solution, 75.
- Hanke, M. T., and Koessler, K. K.** Microchemical colorimetric method for estimating tyrosine, tyramine and other phenols, 217.
- Hanke, M. T., and Koessler, K. K.** Quantitative method for the separation and estimation of phenols, 221.
- Hanner, A.** See Pfyl, B., Reif, G., and Hanner, A.
- Hanzawa, T.** See Rice, F. E., and Hanzawa, T.
- Hardy, P.** Vitali's reaction for cocaine, 27.
- Hardy, P.** Volatilisation and hydrolysis of atropine in toxicological investigations, 482.
- Hart, E. B., Steenbock, H., and Lepkovsky, S.** Solubility of the antiscorbutic vitamin C from deacidated orange juice, 357.
- Hart, M. C., and Payne, W. B.** Toxicity of neoarsphenamine, 305.
- Harter, L. L., and Weimer, J. L.** Pectinase produced by different species of "Rhizopus," 174.
- Hastings, A. B., and Van Slyke, D. D.** Determination of the three dissociation constants of citric acid, 489.
- Hatschek, E.** An Introduction to the Physics and Chemistry of Colloids (Review), 188.
- Häuselmann, L.** See Zschokke, H., and Häuselmann, L.
- Havens, L. C., and Powell, H. M.** Use of the original diagnostic culture for determining the virulence of diphtheria bacilli, 359.
- Hawk, P. B., Smith, C. A., and Bergein, O.** Vitamin content of honey and honeycomb, 30.
- Hawley, H.** Metropolitan Borough of Stepney. Public Analyst's Report for the First Quarter, 1922, 256.
- Hawley, H.** Metropolitan Borough of Stepney. Annual Report of the Borough Analyst for 1921, 391.
- Haynes, D.** See Carré, M. H., and Haynes, D.
- Helbronner, A., and Rudolfs, W.** Attack of minerals by bacteria. Oxidation of zinc blende, 307.
- Heller, H.** Detection of tin as iodide, 367.
- Helmick, H. H.** Estimation of thorium in monazite sand by an emanation method, 136.
- Henderson, J. A. R.** See Callan, T., and Henderson, J. A. R.
- Hepburn, J. S.** Enzymes of the abdominal adipose tissue of the turkey, 81.
- Hepburn, J. S., and St. John, E. Q.** Sugar content of the hen's egg, 171.
- Hepburn, N. W.** Modified Babcock method for determining fat in butter, 74.
- Hesselle, L. De.** Identification of wood extract by means of cinchonine, 179.
- Hetterschij, C. W. G.** Improved hydrogen electrode, 413.
- Hewer, D. G.** See Bolton, E. R., and Hewer, D. G.
- Heyl, F. W., and Greer, F. E.** Sodium hydro-sulphite, 181.
- Hickey, C. H.** See Purcell, C. S., and Hickey, C. H.
- Hijikata, Y.** Occurrence of amino-acids in cow's milk, 264.
- Hildebrand, J. H.** See Bishop, E. R., Kittredge, E. B., and Hildebrand, J. H.
- Hilditch, T. P.** A Concise History of Chemistry (Review), 273.
- Hill, A. E., and Smith, T. M.** Hydrated oxalic acid as an oxidimetric standard, 269.
- Hill, C. A.** The term "Fine Chemicals" (Notes), 118.
- Hinard, G., and Fillon, R.** Chemical composition of starfish meal, 33.
- Hirsch, M.** Detection of traces of osmium, 319.
- Hirst, C. T.** See Greaves, J. E., and Hirst, C. T.
- Hodgman, C. D.,** assisted by **Coolbaugh, M. F.,** and **Senseman, C. E.** Handbook of Chemistry and Physics (Review), 229.
- Hodgson, J. R.** See Purvis, J. E., and Hodgson, J. R.
- Hodgson, T. R.** A spurious malt vinegar (Notes), 254.
- Hoeven, C. Van Der.** Estimation of free sulphuric acid in leather, 221.
- Fr. Hoffmann.** See Gildemeister, E., and Fr. Hoffmann.
- Holde, D., and Wilke, C.** Erucic acid, 447.
- Holleman, A. F.** A Text-Book of Inorganic Chemistry (Review), 413.
- Hoppler, E. F.** Quantitative analysis by measurement of super-saturation-time, 538.
- Hostetter, J. C.** See Cain, J. R., and Hostetter, J. C.
- Howe, P. E.** Micro method for the estimation of proteins in blood, 129.
- Howe, P. E.** Use of sodium sulphate as the globulin precipitant in the determination of proteins in blood, 128.
- Hoyt, L. F., and Pemberton, H. V.** Estimation of glycerol in the presence of sugars, 172.
- Hubbard, R. S.** Estimation of β -hydroxybutyric acid, 130.
- Hucker, G. C.** Microscopic study of bacteria in cheese, 31.
- Huerre, R.** Oil of cade, 303.
- Hunter, A. C.** Decomposition of immature feeding salmon, 443.
- Hunter, G.** Estimation of carnosine in muscle extract, 266.
- Husband, A. D.** See Taylor, W., and Husband, A. D.

I

- Ibbotson, F., and Aitchison, L.** The Analysis of Non-Ferrous Alloys (Review), 374.
- Ingersoll, H. R.** See Congdon, L. A., and Ingersoll, H. R.
- Isaacs, M. L.** Colorimetric estimation of chlorides in blood, 485.

Isaacs, M. L. Colorimetric estimation of hydrogen peroxide, 490.

Islip, H. T. See Roberts, O. D., and Islip, H. T.

J

Jackson, H., and Palmer, W. W. Modification of Folin's colorimetric method for the estimation of uric acid, 176.

Jackson, H., and Palmer, W. W. Estimation of uric acid, 487.

Jacobs, B. R. Estimation of carbon dioxide in self-raising flour, 352.

Jahn, R. See Pictet, A., and Jahn, R.

Jamieson, G. S. See Baughmann, W. F., and Jamieson, G. S.

Janet, M. Hypobromite estimation of urea in urine, 486.

Johansen, E. M. Iodine and bromine values of petroleum products, 315.

Johns, C. O. See Jones, D. B., and Johns, C. O.

Johnson, T. B., and Baudisch, O. Methods for the identification of thymine, 177.

Johnston, R. See Pile, S., and Johnston, R.

Jones, A. J. Examination of chemical foods, 127.

Jones, A. J. Note on calcium phosphate, 127.

Jones, D. B., and Johns, C. O. Estimation of the monoamino acids formed by the hydrolysis of lactalbumin, 30.

Jones, D. O., and Lee, H. R. Electrometric titration of azo dyes, 222.

Jones, G. W., and Parker, W. L. Formation of oxides of nitrogen in the slow combustion and explosion methods in gas analyses, 133.

Jones, G. W. See Allison, V. C., Parker, W. L., and Jones, G. W.

Jones, R. M. See Ross, W. H., Durgin, C. B., and Jones, R. M.

Jonescu, A. See Minovici, S., and Jonescu, A.

Joseph, A. F., and Martin, F. J. The composition of cows' milk in the Sudan, 426.

Joseph, A. F., and Whitfield, B. W. Essential oil of Naal Grass (Sudan), 314.

Jungkunz, R. See Pritzker, J., and Jungkunz, R.

K

Kabayao, D. S. Effect of heat on "Cocculus Indicus" and identification of picrotoxin, 355.

Kahlenberg, L. Colour reactions of cholesterol, 364.

Kai, S. Quantitative estimation of trypsin, 358.

Katz, S. H. See Fieldner, A. C., Katz, S. H., and Longfellow, E. S.

Kay, S. A. A Text-book of Analysis of Inorganic Substances (Review), 137.

Keen, B. A., and Raczkowski, H. Relation between the clay content and certain physical properties of a soil, 84.

Kelley, G. L., and Evers, E. W. Solid sodium hydroxide as an absorbent for carbon dioxide in steel analysis, 91.

Kelley, G. L., and Wiley, J. A. Estimation of chromium in ferro-chromium by electrometric titration, 92.

Kelly, J. W. See Black, O. F., and Kelly, J. W.

Kelly, W. J. Estimation of free sulphur and the coefficient of vulcanisation in vulcanised rubber, 313.

Kennedy, C., and Dutcher, R. A. Influence of the diet of the cow upon the quantity of vitamins A and B in the milk, 216.

Keyes, F. G., Gillespie, L. J., and Mitsukuri, S. Continuous-flow calorimeter, 324.

King, H. Isolation of muscarine from "Amanita muscaria," 526.

Kitching, A. F. The use of ultra-violet light in analysis (Notes), 206.

Kittredge, E. B. See Bishop, E. R., Kittredge, E. B., and Hildebrand, J. H.

Klanhardt, —. Prevention of frothing during distillation, 372.

Kleeman, —. Influence of hydrogen peroxide on the decomposition of plant and animal substances by Kjeldahl's method, 34.

Klemmer, A. Estimation of total sulphur in coal gas, 134.

Klimont, J. Apparatus for hydrogenation at high temperatures without pressure, 228.

Kling, A., and Lassieur, A. Separation and estimation of copper, lead, antimony and tin: Analysis of white metal, 134.

Knowles, H. B. See Lundell, G. E. F., and Knowles, H. B.

Knox, J. Fixation of Atmospheric Nitrogen (Review), 141.

Knudson, A. See Randies, F. S., and Knudson, A.

Koessler, K. K. See Hanke, M. T., and Koessler, K. K.

Kofler, L. Identification and estimation of saponins, 403.

Kofler, L., and Perutz, A. Identification tests for neo-arsphenamine, 525.

Kohman, E. E. Estimation of hydrogen sulphide evolved by foods when cooked at various temperatures, 397.

Kolthoff, I. M. Argentometric titration of phosphoric acid, 185.

Kolthoff, I. M. Der Gebrauch von Farbenindikatoren (Review), 375.

Kolthoff, I. M. Detection of fructose in the presence of aldoses, 301.

Kolthoff, I. M. Iodimetric estimation of iron, 36.

Kolthoff, I. M. Separation of silver and mercury, 134.

Kolthoff, I. M. Use of mercuric perchlorate in electrometric methods of analysis, 411.

Kolthoff, J. M. Active carbon dioxide and hydrogen-ion concentration in the examination of water, 311.

Kolthoff, J. M. Conductivity titrations by means of lead nitrate, 453.

König, K., and Schneiderwirth, J. Relation between the observed and calculated heat values of foodstuffs, 79.

- Kozlowski, A.** Formation of the red pigment of "Beta vulgaris" by oxidation of chromogens, 29.
- Kraisay, A.** Preparation of pure sucrose for standardisation of the saccharimeter, 301.
- Krase, H. J.** Simple formula for the calculation of the specific heats of solids, 322.
- Kraus, E. J.** Volumetric estimation of aluminium, 92.
- Krauze, K. E.** See Budnikov, P. P., and Krauze, K. E.
- Kugelmass, I. N.** The nephelectrometer, 455.
- Kühl, F.** Method for the estimation of bisulphites, 410.
- L**
- Lachartre, M.** Detection of iodates in potassium iodide, 480.
- Laer, H. Van, and Lombaers, R.** Researches on the formation of osazones, 76.
- Lambert, C. A.** Wood turpentine, 406.
- LaMer, V. K.** See Sherman, H. C., LaMer, V. K., and Campbell, H. L.
- Lamb, A. R., Scalione, C. C., and Edgar, G.** Preferential catalytic combustion of carbon monoxide in hydrogen, 316.
- Lane, K. W.** Analysis of crude Chinese camphor, 213.
- Langworthy, C. F., and Deuel, H. J., junr.** Digestibility of raw starches, 356.
- Laroquette, M. De.** Measurement of the mean penetrating power of a beam of X-rays by a new radiochrometric method, 227.
- Larsen, A. T., and White, E. C.** Estimation of traces of oxygen in hydrogen, 223.
- Larsonneau, A.** See Goris, A., and Larsonneau, A.
- Lassieur, A., and Mdma. A.** Rapid electro-analysis of brass, 36.
- Lassieur, A.** See Kling, A., and Lassieur, A.
- Lassieur, Mdma. A.** See Lassieur, A., and Lassieur, Mdma. A.
- Laupper, G.** Self-heating of hay, 29.
- Lauterbach, H.** See Müller, E., and Lauterbach, H.
- Lee, H. R.** Estimation of *H*-acid, 86.
- Lee, H. R.** See Jones, D. O., and Lee, H. R.
- Le Fevre, E.** See Thom, C., and Le Fevre, E.
- Lehmann, F.** See Beckmann, E., and Lehmann, F.
- Lehner, F.** Detection of pyridine, 533.
- Le Moal, —.** See Warcollier, —, and Le Moal, —.
- Lenher, V., and Tosterud, M.** Rapid analysis of potassium perchlorate, 271.
- Leonard, H. A.** See Nelson, B. E., and Leonard, H. A.
- Lepape, A.** See Moureu, C., and Lepape, A.
- Lepkovsky, S.** See Hart, E. B., Steenbock, H., and Lepkovsky, S.
- Lesage, P.** Determination of germinative capacity otherwise than by germination, 216.
- Levene, P. A.** Preparation and analysis of animal nucleic acid 482.
- Levene, P. A., and Rolf, I. P.** Unsaturated fatty acids of egg lecithin, 356.
- Levene, P. A., and Simms, H. S.** Unsaturated fatty acids of liver lecithin, 356.
- Levine, V. E., McCollum, E. V., and Simmonds, N.** Glacial acetic acid as solvent for water-soluble Vitamin B, 444.
- Lexow, T.** Spined dog-fish oil, 439.
- Lifschutz, I.** Colour reaction of "Gynocardia" oil and its spectrum, 125.
- Lindhard, J.** Colorimetric estimation of hydrogen-ion concentration in small quantities of blood, 128.
- Ling, A. R., and Bushill, J. H.** Estimation of calcium in blood, 445.
- Litterscheid, F. M.** A simple test for technical invert sugar in honey with resorcinol or β -naphthol, 76.
- Liverseege, J. F.** Annual Report of the Birmingham City Analyst, 1921, 255.
- Liverseege, J. F.** City of Birmingham. Public Analyst's Report for the Third Quarter, 1922, 512.
- Liverseege, J. F.** City of Birmingham. Report of the City Analyst for the First Quarter, 1922, 295.
- Liverseege, J. F.** City of Birmingham. Report of the City Analyst for the Second Quarter, 1922 (Notes from the Reports of Public Analysts), 431.
- Liverseege, J. F.** Report of the Birmingham Public Analyst for the Fourth Quarter, 1921, 167.
- Liverseege, J. F., and Liverseege, U.** Quantitative microscopy unit (Notes), 430.
- Liverseege, J. F., and Milward, E. M.** Action of glass bottles on soft water (Notes), 67.
- Liverseege, U.** See Liverseege, J. F., and Liverseege, U.
- Lizius, J. L., and Evers, N.** Studies in the titration of acids and bases, 331.
- Lloyd, H. E., and Yeager, F. W.** Estimation of volatile combustible matter in pitch coke, 316.
- Loeb, J.** Proteins and the Theory of Colloidal Behaviour (Review), 495.
- Lombaers, R.** See Van Laer, H., and Lombaers, R.
- Lombard, M.** Analysis of white pigments, 91.
- Longfellow, E. S.** See Fieldner, A. C., Katz, S. H., and Longfellow, E. S.
- Looney, J. M.** Préparation of flexible collodion membranes, 185.
- Looney, J. M.** See Folin, O., and Looney, J. M.
- Lormand, C.** See François, M., and Lormand, C.
- Losana, L.** Colorimetric estimation of phosphorus, 226.
- Losana, L.** Estimation of aluminium, II., 183.
- Losana, L.** Rapid estimation of sulphur, 365, 492.
- Losana, L., and Carozzi, E.** Estimation of titanium in ferrous products, 536.
- Losana, L., and Carozzi, E.** Rapid analysis of ferro-tungsten, 490.
- Lowe, H. M.** Apparatus for technical gas analysis, 133.

- Lucas, A.** The inks of ancient and modern Egypt, 9.
Luce, E., and Doucet, A. Estimation of volatile mustard oil in mustard flour, 353.
Luff, B. D. W., and Porritt, B. D. Estimation of available sulphur in golden sulphide of antimony, 90.
Lundell, G. E. F., and Knowles, H. B. Estimation of iron and vanadium after reduction by hydrogen sulphide, 37.
Lutz, O. Sensitiveness of tests for barium, 93.
Lutz, O. Sensitiveness of tests for strontium, 93.
Lyman, J. F. See Haley, D. E., and Lyman, J. F.
Lynch, G. R. Estimation of arsenic, 535.

M

- MacInnes, D. A., and Townsend, E. B.** Electro-Volumetric estimation of lead, 366.
Maclachlan, A. K. Ministry of Health. Food Orders in Force. Circular 325 (England and Wales), 396.
Maclaurin, J. S. Formation of carbolic acid during putrefaction (Note), 294.
Macleod, A. J. See Morris, J. L., and Macleod, A. J.
Malvezin, P., Rivalland, C., and Grandchamp, L. New method of preparing formaldehyde hydrosulphite, 85.
Maquenne, M. L. Inversion of sucrose by alkaline copper solutions, 479.
Marcelin, A. Measurement of the surface pressure of liquids, 454.
Marcille, R. Estimation of the volatile acidity of wines containing sulphurous acid, 480.
Marshall, C. E. Microbiology (Review), 139.
Martin, F. J. See Joseph, A. F., and Martin, F. J.
Martini, —, and Nourrisson, A. Estimation of sulphurous acid in wines, 211.
McClure, W. B. Quantitative estimation of citric acid in urine by the pentabromo-acetone method, 486.
McCollum, E. V., Simmonds, N., Becker, J. E., and Shipley, P. G. Existence of a vitamin which promotes calcium deposition, 484.
McCollum, E. V., Simmonds, N., Shipley, P. G., and Park, E. A. Studies on experimental rickets, 31.
McCollum, E. V. See Levine, V. E., McCollum, E. V., and Simmonds, N.
McGill, W. J. New indicators for alkaloids, 533.
McIlvaine, T. C. Buffer solution for colorimetric comparison, 89.
Medes, G. See Smith, E., and Medes, G.
Mellon, M. G. Estimation of lead in lead amalgam, 533.
Mellor, J. W. A Comprehensive Treatise on Inorganic and Theoretical Chemistry. Vols. I. and II. (Review), 325.
Meloche, C. C., and Willard, H. H. Estimation of bromide in brine and mineral waters, 368.
Merl, T. The bee's body as a carrier of formic acid, 76.
Merling, R. See Fisher, H. L., Gray, H., and Merling, R.
Merten, H. See Bömer, A., and Merten, H.
Meulen, H. Ter. Estimation of oxygen in organic compounds, 530.
Meyer, A. Analysis of ferruginous tin alloys, 224.
Michaelis, L. Determination of hydrogen ion concentration in water by means of indicators without buffer solutions, 89.
Miller, E. W. Effect of stimulants upon the invertase activity of yeast, 82.
Milward, E. M. See Liverseege, J. F., and Milward, E. M.
Minovici, S., and Jonescu, A. Method for titrating copper, 270.
Misson, G. Colorimetric estimation of vanadium in steel, 321.
Mitchell, C. A. Documents and their Scientific Examination (Review), 497.
Mitchell, C. A. Graphites and other pencil pigments, 379.
Mitsukuri, S. See Keyes, F. G., Gillespie, L. J., and Mitsukuri, S.
Miura, M. See Zilva, S. S., and Miura, M.
Moldenhauer, W. Laboratory Exercises in Applied Chemistry for Students in Technical Schools and Universities (Review), 276.
Monasch, E. Volumetric estimation of zinc, 135.
Monier Williams, G. W. Power Alcohol: Its Production and Utilisation (Review), 327.
Montes, Z. See West, A. P., and Montes, Z.
Morell, J. C. See Fales, H. A., and Morell, J. C.
Morpurgo, G. Indirect determination of the calorific value of fuel naphtha, 179.
Morris, J. L., and Macleod, A. J. Colorimetric estimation of minute amounts of uric acid, 176.
Morris, S. See Foulk, C. W., and Morris, S.
Moureu, C., and Lepape, A. Estimation of krypton and xenon by spectrophotometry, 272.
Mück, F. J. Volumetric estimation of antimony and tin in copper alloys, 490.
Mueller, E. J. The orcinol test for furfurol, 34.
Müller, E., and Lauterbach, H. Potentiometric titration of ferrocyanide, 453.
Müller, J. A., and Foix, A. Colorimetric estimation of small quantities of gold as colloid, 452.
Müller, J. A., and Foix, A. Estimation of hydrogen and its separation from paraffins by means of palladium chloride, 451.
Müller, J. H. Separation of germanium and arsenic, 182.
Murray, J. A. Chemical composition of animal bodies, 355.
Muszynski, J. Investigations of Polish foxglove, 28.
Mutteleit, C. F. Detection of apple juice in "pure fruit" preserves, 398.
Mutteleit, C. F. Detection of coconut oil in butter, 259.

N

- Nakayasu, K.** Detection of soya bean albumin in cow's milk, 398.

- Nelson, B. E., and Leonard, H. A.** Identification of alkaloids under the microscope from the form of their picrate crystals, 212.
- Nelson, P. A., and Senseman, C. E.** Estimation of anthraquinone, 532.
- Némeec, A., and Duchoň, F.** Biochemical evaluation of the vitality of seeds, 215.
- Némeec, A., and Duchoň, F.** Determination of the value of seeds by biochemical means, 29.
- Neubauer, H.** Report of the Fertiliser Research Committee (Method for the estimation of nitric and nitrous nitrogen), 85.
- Nevens, W. B.** See Hamilton, T. S., Nevens, W. B., and Grindley, H. S.
- Nicholls, J. R.** The estimation of morphine, 506.
- Nikolai, F.** Iodimetric estimation of arsenic and antimony sulphides, 367.
- Noetzel, O.** Detection of egg substance in cakes, 122.
- Nourrisson, A.** See Martini, —, and Nourrisson, A.

O

- Oakes, E. T., and Salisbury, H. M.** Use of phthalate solutions for hydrogen electrode standards, 312.
- O'Brien, H. R., and Parker, W. L.** Solubility of carbon monoxide in serum and plasma, 175.
- Osaka, Y., and Ando, K.** Potassium hydrogen oxalate and the standardisation of alkali solutions, 408.
- Osborn, A. S.** The Problem of Proof (Review), 543.
- Owens, J. S.** Suspended impurity in the air, 322.

P

- Painter, W. J.** A starch indicator solution (Notes), 166.
- Palmer, L. S.** Influence of various antiseptics on the activity of lipase, 404.
- Palmer, W. W.** See Jackson, H., and Palmer, W. W.
- Park, E. A.** See McCollum, E. V., Simmonds, N., Shipley, P. G., and Park, E. A.
- Parker, W. L.** See Jones, G. W., and Parker, W. L.
- Parker, W. L.** See also Allison, V. C., Parker, W. L., and Jones, G. W.
- Parker, W. L.** See also Fieldner, A. C., Selvi, W. A., and Parker, W. L.
- Parker, W. L.** See also O'Brien, H. R., and Parker, W. L.
- Parr, S. W.** Short method for the ultimate analysis of coal, 449.
- Parsons, L. W., and Wilson, R. E.** Method of colour measurement for oils, 323.
- Patzauer, A.** The reaction of blood with nascent hydrogen peroxide, 32.
- Paul, T.** Sweetening value of sweet substances, 261.
- Pauli, W.** Colloid Chemistry of the Proteins (Review), 377.
- Paventa, E. F.** Italian Technical Words and Phrases: An English-Italian and Italian-English Dictionary (Review), 47.
- Payne, W. B.** See Hart, M. C., and Payne, W. B.
- Pecaud, M. T.** See Arpin, —, and Pecaud, M. T.
- Pecker, H.** Distilled cherry laurel water, 402.
- Pedley, F. G.** See Shohl, A. T., and Pedley, F. G.
- Pelizzola, C.** See Bruni, G., and Pelizzola, C.
- Pelkan, K. F.** Quantitative estimation of phenols in blood, 217.
- Pemberton, H. V.** See Hoyt, L. F., and Pemberton, H. V.
- Penfold, A. R.** Aromatic aldehydes occurring in certain eucalyptus oils, 214.
- Pepin, C., and Reaubourg, G.** Sulphonated derivatives of naturally occurring sulphurised hydrocarbons, 525.
- Perman, E. P.** Method of testing the degree of incorporation of explosives and other powders, 369.
- Perutz, A.** See Kofler, L., and Perutz, A.
- Peterson, W. H., Fred, E. B., and Schmidt, E. G.** Fermentation of pentoses by moulds, 527.
- Peterson, W. H.** See Fred, E. B., Peterson, W. H., and Anderson, J. A.
- Pfyl, B., Reif, G., and Hanner, A.** Replacement of morphine in the detection of methyl alcohol in potable spirit, 77.
- Philip, J. C.** Dilution of acids to a desired strength (Notes), 67.
- Piccard, J.** Detection of oxygen in organic compounds, 220.
- Pickering, G. F., and Cowlishaw, G. E.** Relation between the refractive index and the chemical characteristics of oils and fats, 220.
- Pictet, A., and Jahn, R.** Depolymerisation products of potato starch, 517.
- Pieraerts, J.** Copal oil: A new fat from the Belgian Congo, 440.
- Pilcher, R. B.** Pasteur Commemoration Fund, 438.
- Pilcher, R. P.** Pharmacy Acts Amendment Bill, 23.
- Pile, S., and Johnston, R.** Tested Methods of Metallurgical Analysis (Non-Ferrous) (Review), 540.
- Plahl, W.** Occurrence of a magnesium salt in the clove, and its detection, 78.
- Plimmer, R. H. A.** See Plimmer, V. G., and Plimmer, R. H. A.
- Plimmer, V. G., and Plimmer, R. H. A.** Vitamins and the Choice of Food (Review), 414.
- Poetschke, P.** Commercial hydrogen peroxide containing preservatives, 304.
- Poirot, G.** See Fleury, P., and Poirot, G.
- Polonovsky, M.** Qualitative separation of alkaline earth metals, 491.
- Polonovsky, M., and Vallée, C.** Micro-estimation of nitrogen and its biological applications, 80.
- Ponder, E.** Estimation of non-protein nitrogen in blood, 446.
- Porritt, B. D.** See Luff, B. D. W., and Porritt, B. D.
- Potonié, R.** The petrological investigation of brown-coal, 531.

- Powell, A. R.** See Schoeller, W. R., and Powell, A. R.
- Powell, H. M.** See Havens, L. C., and Powell, H. M.
- Power, F. B., and Chesnut, V. K.** Occurrence of methyl anthranilate in grape juice, 26.
- Power, F. B., and Chesnut, V. K.** The odorous constituents of peaches, 26.
- Prax, J.** The Villavecchia Reaction for the detection of sesame oil in olive oil, 75.
- Prescher, J., and Claus, R.** Elderberry wine, 480.
- Price, T. S., and Twiss, D. F.** A Course of Practical Organic Chemistry (Review), 373.
- Pritzker, J., and Jungkunz, R.** Hazel nut oil and estimation of arachidic acid, 124.
- Pummerer, R.** New reaction of quinones, 532.
- Purcell, C. S., and Hickey, C. H.** Note on an occurrence of struvite in canned shrimps, 16.
- Purdum, R. B.** See Edgar, G., and Purdum, R. B.
- Purgotti, A.** Detection of magnesium in presence of manganese and phosphoric acid, 37.
- Purvis, J. E., and Hodgson, J. R.** The Chemical Examination of Water, Sewage and Foods (Review), 455.
- Q**
- Quisumbing, F. A., and Thomas, A. W.** Quantitative estimation of reducing sugars by Fehling's solution. Elimination of certain errors, 27.
- R**
- Raczkowski, H.** See Keen, B. A., and Raczkowski, H.
- Rae, W. N.** Two uncommon animal fats (Notes), 510.
- Randles, F. S., and Knudson, A.** Estimation of lipid phosphoric acid ("lecithin") in blood, 446.
- Ratliff, W. C.** See Selvig, W. A., and Ratliff, W. C.
- Reaubourg, G.** See Pepin, C., and Reaubourg, G.
- Redwood, B.** Petroleum (Review), 190.
- Reeve, C. S., and Yeager, F. W.** Coke residue test for creosote oils, 531.
- Reif, G.** Estimation of acetone in potable spirits by means of hydroxylamine hydrochloride, 77.
- Reif, G.** See Pfyl, B., Reif, G., and Hanner, A.
- Renshaw, A.** See Fairbrother, T. H., and Renshaw, A.
- Reuss, A.** Estimation of nitric acid in drinking water by Mayrhofer's method, 311.
- Rice, F. E., and Hanzawa, T.** Estimation of peroxidase in milk, 305.
- Richardson, O. W.** The Emission of Electricity from Hot Bodies (Review), 275.
- Richmond, H. D., and England, E. H.** Note on the sulphuric acid reaction for liver oil (Notes), 431.
- Richter, V. Von.** Organic Chemistry; or, the Chemistry of the Carbon Compounds (Review), 326.
- Rideal, E. K.** See Rideal, S., and Rideal, E. K.
- Rideal, S., and Rideal, E. K.** Chemical Disinfection and Sterilisation (Review), 277.
- Rinck, A.** Formulae for the direct calculation of starch syrup and sucrose in fruit juices, jams, etc., 171.
- Rivalland, C.** See Malvezin, P., Rivalland, C., and Grandchamp, L.
- Roberts, O. D., and Islip, H. T.** The constants of Indian beeswax, 246.
- Robinson, R. H.** Physical properties of commercial lead arsenates, 318.
- Robison, R.** Gelatin as a foodstuff, 263.
- Rodman, C. J.** Estimation of moisture in insulating oils, 178.
- Rolf, I. P.** See Levene, P. A., and Rolf, I. P.
- Rosario, M. V. Del, and Valenzuela, P.** Commercial acetylsalicylic acid, 354.
- Rosedale, J. L.** Amino-acids of flesh, 265.
- Rosenthaler, L.** Iodimetric estimation of arsenic acid, 367.
- Rosenthaler, L.** Oxalic acid as an iodimetric standard, 365.
- Ross, W. H., Durgin, C. B., and Jones, R. M.** Composition of commercial phosphoric acid, 411.
- Rudolfs, W.** See Helbronner, A., and Rudolfs, W.
- Rudolph, O.** Colour reactions of certain nitro compounds, 87.
- Russell, A. S.** An Introduction to the Chemistry of Radio-Active Substances (Review), 539.
- Russell, E. J.** Soil Condition and Plant Growth (Review), 43.
- S**
- Sage, C. E.** Loss of morphine in powdered opium, 522.
- St. John, E. Q.** See Hepburn, J. S., and St. John, E. Q.
- Salisbury, H. M.** See Oakes, E. T., and Salisbury, H. M.
- Salkowski, E.** Allyl alcohol as a preservative for blood, 175.
- Salvador, W.** Food value of Philippine bananas, 439.
- Salway, A. H.** See Cocks, L. V., and Salway, A. H.
- Sanfourche, A.** Analysis of liquid nitrogen peroxide, 316.
- Sanfourche, A.** Reactions between gaseous nitrogen oxides and alkaline solutions, 536.
- Saunders, J. T.** Hydrogen ion concentration of some natural waters, 130.
- Sayce, L. A., and Crawford, A.** Estimation of carbon dioxide in mineral carbonates, 225.
- Sborowsky, M.** New accelerator for the destruction of organic matter in the Kjeldahl process, 530.
- Scalione, C. C.** See Lamb, A. R., Scalione, C. C., and Edgar, G.

- Schlesinger, F.** See Escales, R., and Schlesinger, F.
- Schmidt, E., and Duysen, —.** Plant incrustations, 314.
- Schmidt, E. G.** See Peterson, W. H., Fred, E. B., and Schmidt, E. G.
- Schneider, A.** See Franzeri, H., and Schneider, A.
- Schneider, J., junr.** Contribution to the method of tannin analysis, 448.
- Schneiderwirth, J.** See König, J., and Schneiderwirth, J.
- Schoeller, W. R., and Powell, A. R.** Tantalum, columbium, and their mineral associates: I. Use of tartaric acid in the analysis of natural tantalocolumbates; II. Separation of zirconium from tantalum and from columbium, 93.
- Schryver, S. B.** See Buston, H. W., and Schryver, S. B.
- Schütze, W.** See Tillmans, J., Strohecker, R., and Schütze, W.
- Schwarz, P.** Detection of benzene in petroleum spirit, 315.
- Scott, R. D., and Will, E. G.** Cider preservatives, 123.
- Scott, W. W.** Estimation of suspended impurities in gases, 372.
- Scott, W. W.** Glacial acetic acid method for estimating uranium in carnotite, 410.
- Searle, A. B.** The Clayworker's Handbook (Review), 45.
- Seidell, A.** Experiments on the isolation of vitamin B, 484.
- Seidell, A.** Preparation of vitamin-activated fuller's earth, 357.
- Seligman, B., and Williams, P.** Cleaning aluminium vessels, 493.
- Sell, M. T.** See Steenbock, H., and Sell, M. T.
- Selvig, W. A., and Ratliff, W. C.** Nature of acid water from coal mines and the estimation of acidity, 269.
- Selvig, W. A.** See Fieldner, A. C., Selvig, W. A., and Parker, W. L.
- Semichon, L.** Composition of lees wine and wine lees,
- Senseman, C. E.** See Nelson, P. A., and Senseman, C. E.
- Shaw, J. A.** Method for the estimation of free and combined carbon dioxide (in waters), 130.
- Sheaff, H. M.** Quantitative estimation of minute amounts of gaseous oxygen, 365.
- Sherman, H. C., and Smith, S. L.** The Vitamins (Review), 378.
- Sherman, H. C., LaMer, V. K., and Campbell, H. L.** Estimation of the antiscorbutic vitamin (Vitamin C), 216.
- Shibata, K.** Oxidation reaction in the living cells of plants, 403.
- Shipley, P. G.** See McCollum, E. V., Simmonds, N., Becker, J. E., and Shipley, P. G.
- Shipley, P. G.** See also McCollum, E. V., Simmonds, N., Shipley, P. G., and Park, E. A.
- Shohl, A. T., and Pedley, F. G.** Rapid estimation of calcium in urine, 219.
- Showalter, M. F., and Carr, R. H.** Proteins in maize of high and low protein content, 487.
- Sieke, F.** Formation of phenol by bacteria, 358.
- Simmonds, N.** See Levine, V. E., McCollum, E. V., and Simmonds, N.
- Simmonds, N.** See also McCollum, E. V., Simmonds, N., Becker, J. E., and Shipley, P. G.
- Simmonds, N.** See also McCollum, E. V., Simmonds, N., Shipley, P. G., and Park, E. A.
- Simms, H. S.** See Levene, P. A., and Simms, H. S.
- Simon, L. J.** Oxidation by means of mixtures of sulphuric acid and chromates, 405.
- Simon, L. J., and Guillaumin, A. J. A.** Estimation of carbon and hydrogen by means of the sulphuric-chromic mixture, 530.
- Singh, H. D.** See Annett, H. E., and Singh, H. D.
- Singleton, W.** The use of the daylight lamp in volumetric and colorimetric analysis, 424.
- Singleton, W., and Williams, H.** Inadequacy of "A.R." test for alkalis in calcium carbonate, 252.
- Sinnatt, F. S.** Method of representing the structure of coal seams, 450.
- Sjostrum, O. A.** Determination of the P_H value of commercial glucose as a substitute for the "candy" test, 520.
- Slyke, D. D. Van, and Stadie, W. C.** Estimation of the gases of the blood, 83.
- Slyke, D. D. Van.** See Hastings, A. B., and Slyke, D. D. Van.
- Small, J., and Andrews, F. M. J.** Yohimbine bark, 261.
- Smith, C. A.** See Hawk, P. B., Smith, C. A., and Bergein, O.
- Smith, C. M.** See Graham, J. J. T., and Smith, C. M.
- Smith, E., and Medes, G.** Effect of heat upon the antiscorbutic vitamin in the presence of invertase, 30.
- Smith, F. W.** See Drakeley, T. J., and Smith, F. W.
- Smith, G. F.** See Willard, H. H., and Smith, G. F.
- Smith, P.** See Elsdon, G. D., and Smith, P.
- Smith, S. L.** See Sherman, H. C., and Smith, S. L.
- Smith, T. M.** See Hill, A. E., and Smith, T. M.
- Smith, W. B.** Composition of Soya bean oil, 400.
- Somazzi, —.** New apparatus for the estimation of impurities in fats, 178.
- Sordelli, A.** See Wernicke, R., and Sordelli, A.
- Speckan, C.** Sweetening power of *p*-hydroxy phenylcarbamide derivatives, 525.
- Spencer, G. L.** Flask calibrating and marking device, 94.
- Stadie, W. C.** See Van Slyke, D. D., and Stadie, W. C.
- Staidl, J. A.** See Bray, M. W., and Staidl, J. A.
- Starr, H. E.** Hydrogen ion concentration of human saliva, 529.
- Stehl, T.** Analyses of some Australian fruits, 210.

- Steel, T.** Occurrence of calcium oxalate in Gidgee wattle, 89.
- Steel, T.** Roots of the Dragon Tree, 210.
- Steele, L. L., and Sward, G. G.** Estimation of the acid value of tung oil and other vegetable oils, 177.
- Steenbock, H., and Sell, M. T.** Occurrence of fat-soluble vitamin *A* in relation to plant pigments, 267.
- Steenbock, H.** See Hart, E. B., Steenbock, H., and Lepkovsky, S.
- Stehle, R. L.** Gasometric estimation of urea, 268.
- Stendel, H.** Preparation of creatinine from meat extract, 174.
- Stewart, A. W.** Some Physico-Chemical Themes (Review), 539.
- Stewart, C. R.** See Congdon, L. A., and Stewart, C. R.
- Strachan, J.** Standardisation of China clay, 370.
- Strohecker, R.** See Tillmans, J., Strohecker, R., and Schütze, W.
- Strzyzanski, C.** Spectroscopic detection of carbon monoxide in blood by means of brewers' yeast, 358.
- Sundberg, T.** Sensitiveness of tests for hydrocyanic acid, 215.
- Supplee, G. C., and Bellis, B.** Citric acid content of milk and milk products, 24.
- Supplee, G. C., Whiting, W. A., and Downs, P. A.** Variations in bacteria counts from milk as affected by media and incubation temperature, 485.
- Sward, G. G.** See Steele, L. L., and Sward, G. G.
- Szilard, B.** Direct estimation of very small quantities of radium by means of penetrating rays, 413.
- T**
- Taggart, G. C.** See Csonka, F. A., and Taggart, G. C.
- Takata, M.** Use of dyes as standards in colorimetric methods, 32.
- Tanret, G.** Chemical composition of ergot of diss and ergot of oats, 213.
- Tartar, H. V., and Gailey, Z. J.** Rôle of hydrogen ion concentration in the precipitation of colloids, 531.
- Tarugdi, N.** Toxicology of arsenic, 304.
- Tatham, G. T. P.** See Clark, C. H. D., and Tatham, G. T. P.
- Taylor, W., and Husband, A. D.** Effect of certain variations on the percentage composition of milk, 356.
- Taylor, W. C., and Bailey, A.** Graded seal for joining pyrex to lead glass, 137.
- Terrill, E. H.** Colorimetric estimation of haemoglobin, 445.
- Thom, C., and Le Fevre, E.** Flora of maize meal, 83.
- Thomas, A. W.** See Quisumbing, F. A., and Thomas, A. W.
- Thomas, P., and Carpentier, G.** Highly sensitive reagent for copper: the Kastle-Meyer reagent, 90.
- Thompson, G.** The temperature coefficient of the refractive index of American turpentine (Notes), 469.
- Thomson, J. J.** Rays of Positive Electricity and their Application to Chemical Analyses (Review), 96.
- Thornton, W. M.** Trivalent titanium. II. Estimation of copper and iron in presence of each other, 320.
- Thorpe, E.** A Dictionary of Applied Chemistry. Vol. III., Explosives to K. (Review), 376.
- Thresh, J. C.** The action of natural waters on lead, 459, 500.
- Thyssen, H.** See Batta, G., and Thyssen, H.
- Tilley, F. W.** Influence of peptone on the formation of indol by "B. coli," 174.
- Tillmans, J., Strohecker, R., and Schütze, W.** Detection of incipient putrefaction in meat, 78.
- Tingle, A.** Alleged adsorption of alumina from aluminium sulphate solutions by cellulose, 319.
- Tingle, A.** Estimation of the "bromine figure" or "chlorine factor" of pulp, 222.
- Tisdall, F. F.** Colorimetric estimation of inorganic phosphorus in small quantities of serum, 218.
- Tocher, J. F.** Citric solubility of mineral phosphates, 361.
- Tondani, C.** Rapid estimation of the weighting of silk, 178.
- Tosterud, M.** See Lenher, V., and Tosterud, M.
- Tourrou, R.** See Denigès, G., and Tourrou, R.
- Townsend, E. B.** See MacInnes, D. A., and Townsend, E. B.
- Travers, —.** New method for estimating fluorine in the cold, 35.
- Treadwell, F. P.** Analytical Chemistry. Vol. I., Qualitative (Review), 186.
- Treadwell, W. D.** Reductions with cadmium and lead in volumetric work, 533.
- Treadwell, W. D., and Chervet, D.** Influence of alkali metals on the ferrocyanide titration of certain metals, 535.
- Tsang, C. Y.** See Englis, D. T., and Tsang, C. Y.
- Twiss, D. F.** See Price, T. S., and Twiss, D. F.
- U**
- Ugarte, T.** Estimation of caffeine in Maté, coffee, tea, Kola-nuts and Guarana, 25.
- V**
- Vagliano, M.** See Wollmann, E., and Vagliano, M.
- Valenzuela, P.** See Rosario, M. V. Del, an Valenzuela, P.
- Vallée, C.** See Polonovski, M., and Vallée, C.
- Van Der Hoeven, C.** Estimation of free sulphuric acid in leather, 221.

- Van Der Wielen, —.** Hydroferrocyanic and hydroferricyanic acids as reagents for essential oils, 402.
- Van Eck, P. N.** Detection of blood, 528.
- Van Laer, H., and Lombaers, R.** Researches on the formation of ozones, 76.
- Van Slyke, D. D., and Stadie, W. C.** Estimation of the gases of the blood, 83.
- Van Slyke, D. D.** See Hastings, A. B., and Van Slyke, D. D.
- Van Zijp, C.** Benzidine hydrochloride as a reagent for lignocellulose, 35.
- Van Zijp, C.** New sources of cantharidin, 214.
- Veil, C.** Relation between the chlorine index and the nitrogen content of vegetable mould, 176.
- Villavecchia, G. V.** Trattato di Chimica Analitica Applicata (Review), 494.
- Vogt, E.** Detection and estimation of diluents in flour and bread, 74.
- Vorhees, V., and Adams, R.** Catalytic reduction of organic compounds by platinum oxides, 362.
- Vosburgh, W. C.** See Eppley, M., and Vosburgh, W. C.
- Vulquin, E.** See Entat, M., and Vulquin, E.
- W**
- Wadsworth, R. V.** The theobromine content of cacao-beans and cocoa, 152.
- Waites, H.** Limits of the agglutination test for ricin, 306.
- Waldschmidt-Leitz, E.** See Wilstätter, R., and Waldschmidt-Leitz, E.
- Wallis, T. E.** Characteristics of wheat starch, 516.
- Wang, C. C.** Composition of Chinese edible birds nests and nature of their proteins, 122.
- Wang, C. C.** Isolation and nature of the amino sugar of Chinese edible bird's nests, 123.
- Warcollier, —, and Le Moal, —.** Progressive disappearance of free sulphurous acid in preserved apple juice, 212.
- Wark, I. W.** Rapid iodimetric estimation of copper and iron in mixtures of their salts, 224.
- Watson, A. F.** See Drummond, J. C., and Watson, A. F.
- Watson, A. R.** See Dyer, J. W. W., and Watson, A. R.
- Watson, S. J.** Investigation of Atkinson's process for the estimation of potassium in the presence of sodium, magnesium, sulphates and phosphates, 285.
- Weighell, A.** Agglutinating value of some Durham coals, 180.
- Weigley, M.** See Bailey, C. H., and Weigley, M.
- Weimer, J. L.** See Harter, L. L., and Weimer, J. L.
- Weizenkleber, C.** See Gerum, J., and Weizenkleber, C.
- Wells, A. H., Agcasili, F., and Feliciano, R. T.** Philippine rice, 439.
- Wells, R. C.** Estimation of silica, 537.
- Weizmuller, F.** Destructive action of the amylase of cows' milk on various kinds of starch, 305.
- Wenger, P., and Christin, P.** Analysis of monazite, 452.
- Wernicke, R., and Sordelli, A.** Activation of water by means of metallic copper and its oxides, 311.
- Wertheim, E.** Modified Schiff's reagent, 488.
- West, A. P., and Montez, Z.** Lumbang oil, 27.
- Wheeler, T. S., and Blair, E. W.** A receiver for fractionation in a current of gas or under reduced pressure, 227.
- White, E. C.** See Larsen, A. T., and White, E. C.
- Whitfield, B. W.** See Joseph, A. F., and Whitfield, B. W.
- Whiting, W. A.** See Supplee, G. C., Whiting, W. A., and Downs, P. A.
- Whittles, C. L.** Classification of soils on the basis of chemical analysis, 360.
- Wielen, — Van Der.** Hydroferrocyanic and hydroferricyanic acids as reagents for essential oils, 402.
- Wiley, J. A.** See Kelley, G. L., and Wiley, J. A.
- Wilke, C.** See Holde, D., and Wilke, C.
- Will, E. G.** See Scott, R. D., and Will, E. G.
- Willard, H. H., and Cake, T. E.** Volumetric estimation of sulphide by oxidation to sulphate, 38.
- Willard, H. H., and Hall, D.** Separation and estimation of cobalt, 536.
- Willard, H. H., and Smith, G. F.** Magnesium perchlorate as a drying agent, 538.
- Willard, H. H.** See Meloche, C. C., and Willard, H. H.
- Williams, A. G.** Quantitative estimation of phenanthrene, 87.
- Williams, H.** See Singleton, W., and Williams, H.
- Williams, P.** See Seligman, B., and Williams, P.
- Williams, W. C.** County of Lancaster. Annual Report of the County Analyst for the Year 1921, 296.
- Wilson, F. E.** See Baillie, W. L., and Wilson, F. E.
- Wilson, R. E.** See Parsons, L. W., and Wilson, R. E.
- Wilstätter, R., and Waldschmidt-Leitz, E.** Alkalimetric estimation of aminoacids and peptides, 308.
- Winch, H. J., and Chaudratreya, V. L.** Volumetric estimation of titanium in bauxite, 320.
- Wirthle, F., and Amberger, K.** Tea containing lead, 478.
- Wischo, F.** See Zechner, L., and Wischo, F.
- Wohack, F.** Micro-analytical methods in the examination of foods, 126.
- Wolff, L. R.** Phosphoric acid in lemonade, 354.
- Wollmann, E., and Vagliano, M.** Influence of avitaminosis on lactation, 404.
- Wood, D. R.** Annual Report of the Somerset County Analyst, 1920, 19.
- Wood, D. R.** Somerset County Council. Annual Report of the County Analyst and Bacteriologist for the Year 1921, 349.

Woodroffe, D. Extraction of oils and fats from chrome-leather, 221.

Woodroffe, —. See Chater, —, and Woodroffe, —.

Woog, P. Relation between the molecular properties of certain hydrocarbons and their capacity for fixing iodine, 132.

Wu, H. New colorimetric method for the estimation of plasma proteins, 265.

Y

Yeager, F. W. See Lloyd, H. E., and Yeager, F. W.

Yeager, F. W. See also Reeve, C. S., and Yeager, F. W.

Young, W. A., and Dawson, G. D. Bacterial food poisoning from mutton, 528.

Z

Zahlbruckner, K. Analysis of alloys by means of their specific heats, 412.

Zechner, L., and Wischo, F. Adrenaline tests, 304.

Zielstorff, W., and Benirschke, F. Estimation of acids in silage, 529.

Zijp, C. Van. Benzidine hydrochloride as a reagent for lignocellulose, 35.

Zijp, C. Van. New sources of cantharidin, 214.

Zilva, S. S., and Miura, M. Quantitative estimation of the fat-soluble factor (Vitamin A), 267.

Zilva, S. S. See Drummond, J. C., and Zilva, S. S.

Zilva, S. S. Da. See Drummond, J. C., and Da Zilva, S. S.

Zschokke, H., and Häuselmann, L. Estimation of free acid in aluminium sulphate solutions, 270.

INDEX TO SUBJECTS.

A

"A.R." Test : Alkalis in calcium carbonate ; Inadequacy of — for. W. Singleton and H. Williams, 252.

Abdominal Adipose Tissue : Turkey ; Enzymes of the — of the. J. S. Hepburn, 81.

Absorbent : Carbon dioxide in steel analysis ; Solid sodium hydroxide as an — for. G. L. Kelley and E. W. Evers, 91.

Abstracts of Papers Published in Other Journals : 1922 : 24, 73, 122, 170, 210, 258, 300, 352, 397, 439, 477, 516.

Accelerator : Destruction of organic matter in the Kjeldahl process ; New — for the. M. Sborowsky, 530.

Acetates : Free sulphuric acid and sulphoacetates in cellulose — ; Detection and estimation of. M. Entat and E. Vulquin, 312.

Acetic Acid : Solvent for water-soluble vitamin B ; Glacial — as. V. E. Levine, E. V. McCollum and N. Simmonds, 444.

Acetone : Commercial ammonia ; Presence of — in. J. Bougault and R. Gros, 483.

Acetone : Potable spirits by means of hydroxylamine hydrochloride ; Estimation of — in. G. Reif, 77.

Acetylene : Test-Paper for the detection of —. G. Denigès, 33.

Acetylsalicylic Acid : Commercial —. M. V. Del Rosario and P. Valenzuela, 354.

Acid : Aluminium sulphate solutions ; Estimation of free — in. H. Zschokke and L. Häuselmann, 270.

Acid Methylarsinate : Strychnine ; — of. J. Bouillot, 213.

Acid Value : Tung oil and other vegetable oils ; Estimation of the — of. L. L. Steele and G. G. Sward, 177.

Acid Water : Acidity ; Nature of — from coal mines and the estimation of. W. A. Selvig and W. C. Ratliff, 269.

Acidimetry : Standard in — and alkalimetry ; Symmetrical diphenylguanidine as a. C. A. Carlton, 408.

Acidity : Flour ; Estimation of the — of. Arpin and M. T. Pécoud, 516.

Acidity : Volatile — of wines containing sulphurous acid ; Estimation of the. R. Marcille, 480.

Acids : desired strength ; Dilution of — to a (Notes). J. C. Philip, 67.

Acids : Silage ; Estimation of — in. W. Zielstorff and F. Benirschke, 529.

Acids : Titration of — and bases ; Studies in the. J. L. Lizius and N. Evers, 331.

Aconite Extract : Alkaloids in — ; Estimation of the. A. Astruc, E. Canals and R. Bordier, 212.

Act : Fertilisers and Feeding Stuffs — ; Report of the Kent County Analyst under the, for the Quarter ended Sept. 30, 1921. By F. W. F. Arnaud, 69.

Act : Milk and Dairies (Amendment) —, 1922. L. V. Brock, 436.

Acts Amendment Bill : Pharmacy — ; R. B. Pilcher, 23.

Acts : Public Analysts of Scotland ; Memorandum from Association of. On Administration of Food and Drugs —, 297.

Acts : Sale of Food and Drugs —, Ministry of Health. Extracts from the Annual Report for 1920-1921, and abstract of Reports of Public Analysts for 1920, 69.

Acts : Sale of Food and Drugs —. Extracts from the Annual Report of the Ministry of Health for 1921-1922, and Abstracts of Reports of Public Analysts for 1921. 469.

Address : Retiring president ; Annual — of the. 105.

Adhesives Research Committee : Department of Scientific and Industrial Research. First Report of the —. 434.

Adiabatic Condition : Calorimetry ; Maintenance of the — in. F. Barry, 324.

Adipose Tissue : Turkey ; Enzymes of the abdominal — of the. J. S. Hepburn, 81.

Adrenaline : Tests. L. Zecher and F. Wischo, 304.

Adulterated Chestnut : Product. Gabriel, 478.

Agglutinating Value : Durham coals ; — of some. A. Weighell, 180.

Agglutination Test : Ricin ; Limits of the — for. H. Waites, 306.

Agricultural Analysis, Abstracts : 1922 : 33, 84, 176, 219, 312, 360, 487, 529.

Agriculture : Dominion of Canada, Department of —. Interim Report of the Dominion Chemist. For the year ending March 31, 1921. 168.

Agriculture : United States Department of —. Food Inspection Decision, 184. Colours in Food, 438.

Air : Impurity in the — ; Suspended. J. S. Owens, 322.

Air Ministry : Meteorological Office —. Advisory Committee on Atmospheric Pollution. Report on Observations in the year ending March 31st, 1921. 256.

- Air** : Rock dust in — ; The sugar tube method of estimating. A. C. Fieldner, S. H. Katz and E. S. Longfellow, 272.
- Albumin** : Cow's milk ; Detection of Soya bean — in. K. Nakayasu, 398.
- Alcohol** : Alkali hydroxide ; Preparation of — remaining clear with. H. Dubovitz, 447.
- Alcohol** : Blood ; Allyl — as a preservative for. E. Salkowski, 175.
- Alcohol** : Ethyl — as solvent ; Titrations in. E. R. Bishop, E. B. Kittredge and J. H. Hildebrand, 220.
- Alcohol** : Morphine in the detection of methyl — in potable spirit ; Replacement of. B. Pfyl, G. Reif and A. Hanner, 77.
- Alcohol Test** : Milk ; — for grading. A. O. Dahlberg and H. S. Gardner, 25.
- Aldehydes** : Eucalyptus oils ; Aromatic — occurring in certain. A. R. Penfold, 214.
- Aldehydes** : Hydroxylamine ; The estimation of — and ketones by means of. A. H. Bennett and F. K. Donovan, 146.
- Aldehydes** : Nessler's reagent ; New analytical applications of. Detection of ketones ; estimation of —. J. Bougault and R. Gros, 405.
- Aldoses** : Fructose in the presence of — ; Detection of. I. M. Kolthoff, 301.
- Aleppo** : Oil of turpentine. G. Dupont, 177.
- Aliphatic Amines** : Ammonia ; Separation of — from each other and from. H. Franzeri and A. Schneider, 308.
- Alkali Hydroxide** : Alcohol remaining clear with — ; Preparation of. H. Dubovitz, 447.
- Alkali Hydroxide** : Cuprous oxide obtained from Fehling solution ; Estimation of sugar by titration with — of the. A. Hanak, 75.
- Alkali Metals** : Ferrocyanide titration of certain metals ; Influence of — on the. W. D. Treadwell and D. Chervet, 535.
- Alkali Solutions** : Standardisation of — ; Potassium hydrogen oxalate and the. Y. Osaka and K. Ando, 408.
- Alkalimetric Estimation** : Amino-acids and peptides ; — of. R. Willstätter and E. Waldschmidt-Leitz, 308.
- Alkalimetry** : Standard in acidimetry and — ; Symmetrical diphenyl-guanidine as a. C. A. Carlton, 408.
- Alkaline Copper Solutions** : Sucrose by — ; Inversion of. M. L. Maquenne, 479.
- Alkaline Earth Hydroxides** : Sucrose in the presence of other carbohydrates by means of — ; Estimation of. A. Behre and A. Düring, 478.
- Alkaline Earth Metals** : — ; Qualitative separation of. M. Polonovsky, 491.
- Alkaline Hydrolysis** : Casein ; — of. M. A. Griggs, 73.
- Alkaline Solutions** : Gaseous nitrogen oxides and — ; Reactions between. A. Sanfourche, 536.
- Alkalis** : "A.R." test for — in calcium carbonate ; Inadequacy of. W. Singleton and H. Williams, 252.
- Alkaloids** : Aconite extract ; Estimation of the — in. A. Astruc, E. Canals and R. Bordier, 212.
- Alkaloids** : Crystalline iodobismuthates of — ; Method for the preparation of. M. François and L. G. Blanc, 440.
- Alkaloids** : Crystalline idomercuriates of — ; Method for the preparation of. M. François and L. G. Blanc, 440.
- Alkaloids** : Extract of belladonna ; — contained in. A. Goris and P. Costy, 522.
- Alkaloids** : Indicators for — ; New. W. J. McGill, 533.
- Alkaloids** : Picrate crystals ; Identification of — under the microscope from the form of their. B. E. Nelson and H. A. Leonard, 212.
- Alloys** : Aluminium — and especially of duralumin ; Analysis of. E. M. da Costa-Vet, 368.
- Alloys** : Antimony and tin in copper — ; Volumetric estimation of. F. J. Mück, 490.
- Alloys** : Ferruginous tin — ; Analysis of. A. Meyer, 224.
- Alloys** : Specific heats ; Analysis of — by means of their. K. Zahlbruckner, 412.
- Allyl Alcohol** : Blood ; — as a preservative for. E. Salkowski, 175.
- Alumina** : Cellulose ; Alleged adsorption of — from aluminium sulphate solutions by. A. Tingle, 319.
- Alumina** : Ferric oxide and — from lime by the nitrate method ; Separation of. Charriou, 271.
- Alumina** : Sodium in aluminium and — ; Electrolytic estimation of. R. Geith, 452.
- Aluminium Alloys** : Duralumin ; Analysis of — and especially of. E. M. da Costa-Vet, 368.
- Aluminium** : — ; Estimation of, II. L. Losana, 183.
- Aluminium** : — ; Volumetric estimation of. E. J. Kraus, 92.
- Aluminium** : Beryllium ; The separation of — from. Part III. H. T. S. Britton, 50.
- Aluminium** : *o*-phenetidine ; Separation of — and iron by means of. K. Chalupny and K. Breisch, 491.
- Aluminium** : Sodium in — and alumina ; Electrolytic estimation of. R. Geith, 452.
- Aluminium Sulphate Solutions** : Alumina from — by cellulose ; Alleged adsorption of. A. Tingle, 319.
- Aluminium Sulphate Solutions** : Free acid in — ; Estimation of. H. Zschokke and L. Häuselmann, 270.
- Aluminium** : Tungsten ; Estimation of — in. V. and K. Froboese, 225.
- Aluminium Vessels** : Cleaning —. B. Seligman and P. Williams, 493.
- Amalgam** : Lead in lead — ; Estimation of. M. G. Mellon, 533.
- Amanita Muscaria** : Muscarine from — ; Isolation of. H. King, 526.
- American Turpentine** : Refractive index of — ; The temperature coefficient of the (Notes). G. Thompson, 469.

- Amines** : Aliphatic — from each other and from ammonia ; Separation of. H. Franzeri and A. Schneider, 308.
- Amino-Acid Nitrogen** : Blood ; Colorimetric estimation of — in. O. Folin, 309.
- Amino-Acid Nitrogen** : Normal urine ; Colorimetric estimation of — in. O. Folin, 309.
- Amino-Acids** : Cow's milk ; Occurrence of — in. Y. Hijikata, 264.
- Amino-Acids** : Flesh ; — of. J. L. Rosedale, 265.
- Amino-Acids** : Foodstuffs ; Estimation of — in. T. S. Hamilton, W. B. Nevens, and H. S. Grindley, 33.
- Amino-Acids** : Peptides ; Alkalimetric estimation of — and. R. Willstätter and E. Waldschmidt-Leitz, 308.
- Amino-Acids** : Proteins, etc. ; Separation of — from the products of hydrolysis of. H. W. Buston and S. B. Schryver, 264.
- Amino Sugar** : Chinese edible bird's nests ; Isolation and nature of the — of. C. C. Wang, 123.
- Ammonia** : Acetone in commercial — ; Presence of. J. Bougault and R. Gros, 483.
- Ammonia** : Aliphatic amines from each other and from — ; Separation of. H. Franzeri and A. Schneider, 308.
- Ammoniacal Nitrogen** : Nitrogenous organic substances, especially in protein materials and their decomposition products ; Estimation of — in. J. Froidevaux, 308.
- Amylase** : Starch ; Destructive action of the — of cows' milk on various kinds of. F. Welzmüller, 305.
- Ammonium Phosphomolybdate** : Vanadic acid with — ; Co-Precipitation of. J. R. Cain and J. C. Hostetter, 184.
- Analyst** : City of Birmingham. Report of the City — for the First Quarter, 1922. J. F. Liverseege, 295.
- Analyst** : County of Lancaster. Annual Report of the County — for the Year 1921. W. C. Williams, 296.
- Analyst** : Metropolitan Borough of Stepney. Annual Report of the Borough — for 1921. H. Hawley, 391.
- Analyst** : Somerset County Council. Annual Report of the County — and Bacteriologist for the Year 1921. D. R. Wood, 349.
- Analytical Applications** : Nessler's reagent ; New — of. Detection of ketones ; estimation of aldehydes. J. Bougault and R. Gros, 405.
- Animal Bodies** : Chemical composition of —. J. A. Murray, 355.
- Animal Fats** : Uncommon — ; Two (Notes). W. N. Rae, 510.
- Animal Kingdom** : Carnosine in the — ; Distribution of. W. M. Clifford, 266.
- Animal Nucleic Acid** : — ; Preparation and analysis of. P. A. Levene, 482.
- Animal Substances** : Hydrogen peroxide on the decomposition of plant and — by Kjeldahl's method ; Influence of. Kleeman, 34.
- Anion** : Nitrous — ; Detection of the. P. Falciola, 492.
- Annual Report** : Sale of Food and Drugs Acts. Extracts from the — of the Ministry of Health for 1921-1922, and Abstracts of Reports of Public Analysts for 1921. 469.
- Anthraquinone** : — ; Estimation of. P. A. Nelson and C. E. Senseman, 532.
- Antimony and Arsenic Sulphides** : — ; Iodimetric estimation of. F. Nikolai, 367.
- Antimony** : — ; Electrolytic estimation of. H. Angenot, 136.
- Antimony** : — ; Test for. P. Haferkorn, 224.
- Antimony** : Copper alloys ; Volumetric estimation of — and tin in. F. J. Mück, 490.
- Antimony** : Copper and brass ; The estimation of small quantities of — in. B. S. Evans, 1.
- Antimony** : Copper, lead, — and tin ; Separation and estimation of : Analysis of white metal. A. Kling and A. Lassieur, 134.
- Antiscorbutic Vitamin** : — (Vitamin C) ; Estimation of the. H. C. Sherman, V. K. LaMer and H. L. Campbell, 216.
- Antiscorbutic Vitamin C** : desiccated orange juice ; Solubility of the — from. E. B. Hart, H. Steenbock and S. Lepkovsky, 357.
- Antiscorbutic Vitamin** : Invertase ; Effect of heat upon the — in the presence of. E. Smith and G. Medes, 30.
- Antiseptic Action** : Chemical constitution and — in the coal tar dyestuffs ; Relation between. T. H. Fairbrother and A. Renshaw, 307.
- Antiseptics** : Lipase ; Influence of various — on the activity of. L. S. Palmer, 404.
- Antoine Chiris** : Lavender oil ; Reports on. Etablissements —. 303.
- Apparatus, Abstracts** : 1922 : 40, 137, 185, 493.
- Apparatus** : Atomising —. 372.
- Apparatus** : Hydrofluoric acid ; — of transparent Bakelite for measuring. L. J. Curtmann, 493.
- Apparatus** : Hydrogenation at high temperatures without pressure ; — for. J. Klimont, 228.
- Apparatus** : Impurities in fats ; New — for the estimation of. Somazzi, 178.
- Apparatus** : Rapid electrolysis without rotating electrodes ; — for. G. Edgar and R. B. Purdum, 371.
- Apparatus** : Waterbath ; — for stirring. C. H. D. Clark and G. T. P. Tatham, 412.
- Apple-Juice** : Free sulphurous acid in preserved — ; Progressive disappearance of. Warcollier and Le Moal, 212.
- Apple-Juice** : " Pure fruit " preserves ; Detection of — in. M. C. F. Muttelet, 398.
- Arachidic Acid** : Hazel nut oil and estimation of —. J. Pritzker and R. Jungkunz, 124.
- Argentometric Titration** : Phosphoric acid ; — of. I. M. Koltzoff, 185.
- Aromatic Aldehydes** : Eucalyptus oils ; — occurring in certain. A. R. Penfold, 214.
- Aromatic Organic Compounds** : Nitro group in — ; Estimation of the. T. Callan and J. A. R. Henderson, 363.

- Arsenic Acid** : —; Iodimetric estimation of. L. Rosenthaler, 367.
- Arsenic and Antimony Sulphides** : —; Iodimetric estimation of. F. Nikolai, 367.
- Arsenic** : —; Estimation of. G. R. Lynch, 535.
- Arsenic** : Germanium and —; Separation of. J. H. Müller, 182.
- Arsenic** : Nitrates and nitrites in the estimation of — by the distillation method; Errors caused by, and a means for their prevention. J. J. T. Graham and C. M. Smith, 318.
- Arsenic** : Quinine molybdate; Colorimetric estimation of — by means of. D. Chouchak, 317.
- Arsenic** : Silicate rocks; Estimation of minute traces of — in. O. Hackl, 135.
- Arsenic** : Toxicology of —. N. Tarugdi, 304.
- Arsphenamine** : Neo- —; Toxicity of. M. C. Hart and W. B. Payne, 305.
- Artificial Daylight** : Laboratory purposes (Sheringham System); The application of — to. S. H. Groom, 419.
- Artificial** : Edible fats. R. Escales and F. Schlesinger, 171.
- Atkinson's Process** : Potassium in the presence of sodium, magnesium, sulphates and phosphates; Investigation of — for the estimation of. S. J. Watson, 285.
- Atmospheric Pollution** : Metereological Office, Air Ministry. Advisory Committee on —. Report on Observations in the Year ending March 31st, 1921. 256.
- Atomic Weights** : International Committee on —. Twenty-Eighth Annual Report. 208.
- Atomising** : Apparatus. 372.
- Atropine** : Toxicological investigations; Volatilisation and hydrolysis of — in. P. Hardy, 482.
- Australian Fruits** : Some —; Analyses of. T. Steel, 210.
- Autoclave Test** : Chemical glassware; — for the grading of. W. L. Baillie and F. E. Wilson, 226.
- Avitaminosis** : Lactation; Influence of — on. E. Wollman and M. Vagliano, 404.
- Azo Dyes** : Electrometric titration of —. D. O. Jones and H. R. Lee, 222.
- B**
- Babcock Method** : Fat in butter; Modified — for determining. N. W. Hepburn, 74.
- Bacilli** : Virulence of diphtheria —; Use of the original diagnostic culture for determining the. L. C. Havens and H. M. Powell, 359.
- B. Coli** : Peptone on the formation of indol by; Influence of. F. W. Tilley, 174.
- Bacteria** : Cheese; Microscopic study of — in. G. C. Hucker, 31.
- Bacteria Counts** : Milk as affected by media and incubation temperature; Variations in — from. G. C. Supplee, W. A. Whiting and P. A. Downs, 485.
- Bacteria** : Minerals by —; Attack of. Oxidation of zinc blende. A. Helbronner and W. Rudolfs, 307.
- Bacteria** : Pentose-fermenting —; Characteristics of certain. E. B. Fred, W. H. Peterson and J. A. Anderson, 82.
- Bacteria** : Phenol by —; Formation of. F. Sieke, 358.
- Bacteria** : Water-soluble B vitamin; — as a source of. S. R. Damon, 81.
- Bacterial Food Poisoning** : Mutton; — from. W. A. Young and G. D. Dawson, 528.
- Bacteriological, Physiological, etc. Abstracts** : 1922 : 29, 79, 128, 173, 215, 261, 304, 355, 403, 443, 483, 525.
- Bacteriology** : Department of Scientific and Industrial Research. Food Investigation Board. Canned meat and fish; The — of. 513.
- Bakelite** : Hydrofluoric acid; Apparatus of transparent — for measuring. L. J. Curtmann, 493.
- Barbituric Acid** : Veronal and hypnotic derivatives of — and its applications; A reaction of. R. Fabre, 523.
- Barium** : Tests for —; Sensitiveness of. O. Lutz, 93.
- Bark** : Cinnamon —; Powdered. C. T. Bennett, 353.
- Bark** : Yohimbine —. J. Small and F. M. J. Andrews, 261.
- Bases** : Acids and —; Studies in the titration of. J. L. Lizius and N. Evers, 331.
- Basic Lead Acetate** : Solutions containing reducing sugars by means of —; Clarification of. Effect of different agents for removing lead. D. T. Englis and C. Y. Tsang, 301.
- Bauxium** : Titanium in —; Volumetric estimation of. Effect of different agents for removing lead. D. T. Englis and C. Y. Tsang, 301.
- Bauxium** : Titanium in —; Volumetric estimation of. H. J. Winch and V. L. Chaudra-treya, 320.
- Bee's Body** : Formic acid; The — as a carrier of. T. Merl, 76.
- Beeswax** : Indian —; The constants of. O. D. Roberts and H. T. Islip, 246.
- Belgian Congo** : Copal oil. A new fat from the —. J. Pieraerts, 440.
- Belladonna** : Extract of —; Alkaloids contained in. A. Goris and P. Costy, 522.
- Belladonna Leaves** : —; Chemical composition of. A. Goris and A. Larssonneau, 303.
- Benedict and Folin-Wu Methods** : Blood sugar estimations; Comparison of the — for. F. A. Csonka and G. C. Taggart, 528.
- Benzene** : Petroleum spirit; Detection of — in. P. Schwarz, 315.
- Benzidine Hydrochloride** : Lignocellulose; — as a reagent for. C. van Zijp, 35.
- Beryllium** : Aluminium from —; The Separation of. Part III. H. T. S. Britton, 50.
- Beta Vulgaris** : Red pigment of — by oxidation of chromogens; Formation of the. A. Kozlowski, 29.

- Bill**: Pharmacy Acts Amendment —. R. B. Pilcher, 23.
- Biochemical Evaluation**: Seeds; — of the vitality of. A. Nĕmec and F. Duchoň, 215.
- Biochemical Means**: Value of seeds by —; Determination of the. A. Nĕmec and F. Duchoň, 29.
- Biological Applications**: Nitrogen and its —; Micro-Estimation of. M. Polonovski and C. Vallée, 80.
- Bird's Nests**: Amino sugar of Chinese edible —; Isolation and nature of the. C. C. Wang, 123.
- Bird's Nests**: Chinese edible —; Composition of, and nature of their proteins. C. C. Wang, 122.
- Birmingham City Analyst**: Annual Report of the —, 1921. J. F. Liverseege, 255.
- Birmingham City Analyst**: Report of the — for the Third Quarter, 1921. 19.
- Birmingham**: City of —. Public Analyst's Report for the Third Quarter, 1922. J. F. Liverseege, 512.
- Birmingham**: City of —; Report of the City Analyst for the Second Quarter, 1922. J. F. Liverseege, 431.
- Birmingham**: City of —. Report of the City Analyst for the First Quarter, 1922. J. F. Liverseege, 295.
- Birmingham Public Analyst**: Fourth Quarter, 1921; Report of the — for the. J. F. Liverseege, 167.
- Bismuth**: Urine; Detection of — in. P. Aubry, 129.
- Bisulphites**: Estimation of —; Method for the. F. Kühl, 410.
- Bitter Substances**: Lupins; Removal of — from. E. Beckmann and F. Lehmann, 361.
- Blende**: Bacteria; Attack of minerals by. Oxidation of zinc —. A. Helbronner and W. Rudolfs, 307.
- Blood**: Amino-acid nitrogen in —; Colorimetric estimation of. O. Folin, 309.
- Blood**: —; Detection of. P. N. Van Eck, 528.
- Blood**: Calcium in —; Estimation of. A. R. Ling and J. H. Bushill, 445.
- Blood**: Carbon monoxide in — by means of brewers' yeast; Spectroscopic detection of. C. Strzyzanski, 358.
- Blood**: Chlorides in —; Colorimetric estimation of. M. L. Isaacs, 485.
- Blood**: Gases of the —; Estimation of the. D. D. Van Slyke and W. C. Stadie, 83.
- Blood**: Hydrogen ion concentration in small quantities of —; Colorimetric estimation of. J. Lindhard, 128.
- Blood**: Iron in the —; New quantitative method for the estimation of. A. L. Brown, 217.
- Blood**: Lipoid phosphoric acid ("lecithin") in —; Estimation of. F. S. Randles and A. Knudson, 446.
- Blood**: Nascent hydrogen peroxide; The reaction of — with. A. Patzauer, 32.
- Blood**: Non-protein nitrogen in —; Estimation of. E. Ponder, 446.
- Blood**: Phenols in —; Quantitative estimation of. K. F. Pelkan, 217.
- Blood**: Preservative for —; Allyl alcohol as a. E. Salkowski, 175.
- Blood**: Proteins in —; Micro method for the estimation of. P. E. Howe, 129.
- Blood**: Proteins in —; Use of sodium sulphate as the globulin precipitant in the determination of. P. E. Howe, 128.
- Blood Sugar Estimations**: Benedict and Folin-Wu Methods for —; Comparison of the. F. A. Csonka and G. C. Taggart, 528.
- Blood**: Uric acid in —; Colorimetric estimation of. Grigaut, 83.
- Bodies**: Animal —; Chemical composition of. J. A. Murray, 355.
- Bone Fat**: Neat's foot oil; — and. H. Eckart, 521.
- Boric Acid**: Cakes; — in (Notes). J. T. Dunn, 117.
- Borough Analyst**: Metropolitan Borough of Stepney. Annual Report of the — for 1921. H. Hawley, 391.
- Bottles**: Soft water; Action of glass — on (Notes). J. F. Liverseege and E. M. Milward, 67.
- Brass**: Antimony in copper and —; The estimation of small quantities of. B. S. Evans, 1.
- Brass**: Electro-analysis of —; Rapid. A. and Mme. A. Lassieur, 36.
- Bread**: Diluents in flour and —; Detection and estimation of. E. Vogt, 74.
- Brewers' Yeast**: Carbon monoxide in blood by means of —; Spectroscopic detection of. C. Strzyzanski, 358.
- Brine**: Fish frozen in chilled —; Preservation of. L. H. Almy and E. Field, 306.
- Brines**: Bromide in — and mineral waters. Estimation of. C. C. Meloche and H. H. Willard, 368.
- British**: Chemical Standard Steel "A2." (Analytically standardised sample.) 73.
- British**: Chemical Standard Steel "U." (Analytically Standardised Sample.) 192.
- British Coals**: —; Ultimate composition of. T. J. Drakeley and F. W. Smith, 180.
- British Engineering Standards Association**: —. Standard specification for creosote for wood preservation. 71.
- B.P. Ointments**: Examination of —; The. N. Evers and G. D. Elsdon, 197.
- Bromide**: Brines and mineral waters; Estimation of — in. C. C. Meloche and H. H. Willard, 368.
- Bromine and Iodine Values**: Petroleum products; — of. E. M. Johansen, 315.
- "Bromine Figure"**: Pulp; Estimation of the — or "chlorine factor" of. A. Tingle, 222.
- Brown-Coal**: Petrological investigation of —; The. R. Potonié, 531.
- Buffer Solution**: Colorimetric comparison; — for. T. C. McIlvaine, 89.
- Buffer Solutions**: Hydrogen ion concentration in water by means of indicators without — Determination of. L. Michaelis, 89.

- Burnt Pyrites:** Sulphur in —; Volumetric estimation of. F. Chiò, 38.
Butter: Coconut oil in —; Detection of C. F. Muttelet, 259.
Butter: Fat in —; Modified Babcock Method for determining. N. W. Hepburn, 74.

C

- Cacao-Beans:** Theobromine content of — and cocoa; The. R. V. Wadsworth, 152.
Cade: Oil of —. R. Huerre, 303.
Cadmium: Volumetric work; Reductions with — and lead in. W. D. Treadwell, 533.
Caffeine Excretion: Duration of — in man; Quantitative estimation of the. E. Friedberg, 174.
Caffeine: Maté, coffee, tea, kola-nuts and guarana; Estimation of — in. T. Ugarte, 25.
Caffeine: Silicotungstic acid; Estimation of — by means of. A. Azadian, 172.
Caffeines: Commercial —; Toxicity of. 441.
Caffeines: Toxicity of certain —; Abnormal 441.
Cairo: Government Analytical Laboratory, — Report of the Director for the Year 1920, 21.
Cakes: Boric acid in — (Notes). J. T. Dunn, 117.
Cakes: Egg substance in —; Detection of. O. Noetzel, 122.
Calcium: Blood; Estimation of — in. A. R. Ling and J. H. Bushill, 445.
Calcium Carbonate: Alkalis in —; Inadequacy of "A.R." test for. W. Singleton and H. Williams, 252.
Calcium Caseinate: Casein and —. E. M. Bailey, 519.
Calcium Deposition: Vitamin which promotes —; Existence of a. E. V. McCollum, N. Simmonds, J. E. Becker and P. G. Shipley, 484.
Calcium Pectate: Pectin as —; Estimation of. M. H. Carré and D. Haynes, 263.
Calcium Phosphate: —; Note on. A. J. Jones, 127.
Calcium: Urine; Rapid estimation of — in. A. T. Shohl and F. G. Pedley, 219.
Calorific Value: Fuel naphtha; Indirect determination of the — of. G. Morpurgo, 179.
Calorimeter: Continuous Flow —. F. G. Keyes, L. J. Gillespie and S. Mitsukuri, 324.
Calorimetry: Adiabatic condition in —; Maintenance of the. F. Barry, 324.
Camel's Colostrum: —; Composition of. H. L. Fales, 483.
Camphor: Crude Chinese —; Analysis of. K. W. Lane, 213.
Camphor: Monobrom- —; Estimation of. E. O. Eaton, 173.
Canada: Dominion of —. Department of Agriculture. Interim Report of the Dominion Chemist for the year ending March 31, 1921. 168.
"Candy" Test: P_H value of commercial glucose as a substitute for the —; Determination of the. O. A. Sjostrum, 520.
Canned Foods: Department of Scientific and Industrial Research. Food Investigation Board. The Methods Used for the Inspection of —. Part II., Canned Marine Products, 350.
Canned Meat and Fish: Department of Scientific and Industrial Research. Food Investigation Board. The Bacteriology of —, 513.
Canned Shrimps: Struvite in —; Note on an occurrence of. C. S. Purcell and C. H. Hickey, 16.
Cantharidin: Sources of —; New. C. Van Zijp, 214.
Caoutchouc: Manganese in raw — and the origin of tackiness; Presence of. G. Bruni and C. Pelizzola, 34.
Cape Chestnuts: Oil of —. 400.
Carbohydrates: Sucrose in the presence of other — by means of alkaline earth hydroxides; Estimation of. A. Behre and A. Düring, 478.
Carbohydrates: Test for —; New. O. Baudisch and H. J. Deuel, 399.
Carbolic Acid: *m*- and *p*-cresols from coal-tar crude —; Separation of. A. F. Campbell, 451.
Carbolic Acid: Putrefaction; Formation of — during (Notes). J. S. Maclaurin, 294.
Carbon: — and hydrogen by means of the sulphuric-chromic mixture; Estimation of. L. J. Simon and A. J. A. Guillaumin, 530.
Carbon: Cast iron and steel by Corleis' method; Estimation of — in. G. Batta and H. Thyssen, 271.
Carbon Dioxide: Flour strength; Loss of — from dough as an index of. C. H. Bailey and M. Weigley, 258.
Carbon Dioxide: Free and combined — (in waters); Method for the estimation of. J. A. Shaw, 130.
Carbon Dioxide: Mineral carbonates; Estimation of — in. L. A. Sayce and A. Crawford, 225.
Carbon Dioxide: Self-raising flour; Estimation of — in. B. R. Jacobs, 352.
Carbon Dioxide: Sodium hydroxide solution free from —; Preparation of. J. Cornog, 181.
Carbon Dioxide: Steel analysis; Solid sodium hydroxide as an absorbent for — in. G. L. Kelley and E. W. Evers, 91.
Carbon Dioxide: Water; Active — and hydrogen-ion concentration in the examination of. J. M. Kolthoff, 311.
Carbon Monoxide: Brewers' yeast; Spectroscopic detection of — in blood by means of. C. Strzyzanski, 358.
Carbon Monoxide: Hydrogen; Preferential catalytic combustion of — in. A. R. Lamb, C. C. Scalione and G. Edgar, 316.
Carbon Monoxide: Serum and plasma; Solubility of — in. H. R. O'Brien and W. L. Parker, 175.
Carbonates: Carbon dioxide in mineral —; Estimation of. L. A. Sayce and A. Crawford, 225.

- Carnosine**: Animal kingdom; Distribution of — in the. W. M. Clifford, 266.
- Carnosine Content**: Meat; Effect of cold storage upon the — of. W. M. Clifford, 443.
- Carnosine**: Muscle extract; Estimation of — in. G. Hunter, 266.
- Carnotite**: Uranium in —; Glacial acetic acid method for estimating. W. W. Scott, 410.
- Casein**: Alkaline hydrolysis of —. M. A. Griggs, 73.
- Casein**: Calcium caseinate; — and. E. M. Bailey, 519.
- Cast Iron**: Carbon in — and steel by Corleis' method; Estimation of. G. Batta and H. Thyssen, 271.
- Castor Bean**: Lipase. Its preparation and some of its properties. D. E. Haley and J. F. Lyman, 173.
- Catalytic Combustion**: Carbon monoxide in hydrogen; Preferential — of. A. R. Lamb, C. C. Scallione and G. Edgar, 316.
- Catalytic Reduction**: Organic compounds by platinum oxides; — of. V. Voorhees and R. Adams, 362.
- Cells**: Living — of plants; Oxidation reaction in the. K. Shibata, 403.
- Cellulose Acetates**: Free sulphuric acid and sulphoacetates in —; Detection and estimation of. M. Entat and E. Vulquin, 312.
- Cellulose**: Alumina from aluminium sulphate solutions by —; Alleged adsorption of. A. Tingle, 319.
- Centenary**: Pasteur —; The. 209.
- Cheese**: Bacteria in —; Microscopic study of. G. C. Hucker, 31.
- Chemical Changes**: Wood and wood pulp; — involved during infection and decay of. M. W. Bray and J. A. Staidl, 175.
- Chemical Composition**: Animal bodies; — of. J. A. Murray, 355.
- Chemical Constitution**: Coal tar dyestuffs; Relation between — and antiseptic action in the. T. H. Fairbrother and A. Renshaw, 307.
- Chemical Examiner**: Government of Madras. Report of the — for 1921. 433.
- Chemical Foods**: —; Examination of. A. J. Jones, 127.
- Chemical Glassware**: Grading of —; Autoclave test for the. W. L. Baillie and F. E. Wilson, 226.
- Chemical Measurements**: Iodine for use in —; Comparative values of different specimens of. C. W. Foulk and S. Morris, 223.
- Chemistry**: Tanning —; Analysis in. G. Grasser, 132.
- Cherry Laurel Water**: —; Distilled. H. Pecker, 402.
- Chestnut Product**: —; Adulterated. Gabriel, 478.
- Chestnuts**: Cape —; Oil of. 400.
- China Clay**: Standardisation of —. J. Strachan, 370.
- Chinese Camphor**: Crude —; Analysis of. K. W. Lane, 213.
- Chinese Edible Bird's Nests**: Amino sugar of —; Isolation and nature of the. C. C. Wang, 123.
- Chinese Edible Bird's Nests**: Proteins; Composition of — and nature of their. C. C. Wang, 122.
- Chlorides**: Blood; Colorimetric estimation of — in. M. L. Isaacs, 485.
- "Chlorine Factor"**: "Bromine figure," or — of pulp; Estimation of the. A. Tingle, 222.
- Chlorine Index**: Vegetable mould; Relation between the — and the nitrogen content of. C. Veil, 176.
- Cholesterol**: Colour reactions of —. L. Kahlenberg, 364.
- Chromates**: Sulphuric acid and —; Oxidation by means of mixtures of. L. J. Simon, 405.
- Chromate-Leather**: Oils and fats from —; Extraction of. D. Woodroffe, 221.
- Chromic Acid**: Humus by means of —; Estimation of. A. Gehring, 361.
- Chromium**: Ferrochromium by electrometric titration; Estimation of — in. G. L. Kelley and J. A. Wiley, 92.
- Chromogens**: "*Beta vulgaris*" by oxidation of —; Formation of the red pigment of. A. Kozlowski, 29.
- Cider**: Preservatives. R. D. Scott and E. G. Will, 123.
- Cinchonine**: Wood extract by means of —; Identification of. L. De Hesselle, 179.
- Cinnamon Bark**: —; Powdered. C. T. Bennett, 353.
- Citric Acid Content**: Milk and milk products; — of. G. C. Supplee and B. Bellis, 24.
- Citric Acid**: Pentabromoacetone method; Quantitative estimation of — in urine by the. W. B. McClure, 486.
- Citric Acid**: Three dissociation constants of —; Determination of the. A. B. Hastings and D. D. Van Slyke, 489.
- Citric Solubility**: Mineral phosphates; — of. J. F. Tocher, 361.
- City Analyst**: City of Birmingham. Report of the — for the First Quarter, 1922. J. F. Liversseege, 295.
- City Analyst**: City of Birmingham. Report of the — for the Second Quarter, 1922. J. F. Liversseege, 431.
- Clay**: China —; Standardisation of. J. Strachan, 370.
- Clay**: —; Characterisation of. N. Comber, 219.
- Clay Content**: — and certain physical properties of a soil; Relation between the. B. A. Keen and H. Raczkowski, 84.
- Cleaning**: Museum exhibits; The — and restoration of. 120.
- Clove**: Magnesium salt in the —, and its detection; Occurrence of a. W. Plahl, 78.
- Coal Ash**: Standard gas furnace and micro-pyrometer methods for determining the fusibility of —; Comparison of the. A. C. Fieldner, W. A. Selvig and W. L. Parker, 449.
- Coal**: Brown —; The petrological investigation of. R. Potonié, 531.

- Coal Committee:** Department of Scientific and Industrial Research. Sampling and Analysis of —. 256.
- Coal Gas:** Total sulphur in —; Estimation of. A. Klemmer, 134.
- Coal Mines:** Acid water from — and the estimation of acidity; Nature of. W. A. Selvig and W. C. Ratliff, 269.
- Coal:** Oxidation of —; Determination of the degree of. G. Charpy and G. Decorps, 40.
- Coal Seams:** Structure of —; Method of representing the. F. S. Sinnatt, 450.
- Coal-Tar Crude Carbohc Acid:** *m*- and *p*-Cresols from —; Separation of. A. F. Campbell, 451.
- Coal-Tar Dyestuffs:** Chemical constitution and antiseptic action in the —; Relation between. T. H. Fairbrother and A. Renshaw, 307.
- Coal:** Ultimate analysis of —; Short method for the. S. W. Parr, 449.
- Coals:** British —; Ultimate composition of. T. J. Drakeley and F. W. Smith, 180.
- Cobalt:** —; Separation and estimation of. H. H. Willard and D. Hall, 536.
- Coals:** Durham —; Agglutinating value of some. A. Weighell, 180.
- Cobalt:** Manganese, iron and —; Reaction of. D. Baralew, 36.
- Cobalt:** Nickel and — in silicate rocks; Detection of. O. Hackl, 319.
- Cocaine:** Vitali's reaction for —. P. Hardy, 27.
- Cocculus Indicus:** Picrotoxin; Effect of heat upon — and identification of. D. S. Kabayao, 355.
- Cocoa:** Cacao-beans and —; The theobromine content of. R. V. Wadsworth, 152.
- Coconut Oil:** Butter; Detection of — in. C. F. Muttelet, 259.
- Cod Liver Oil:** Vitamin content; Preparation of — and its effect upon the. J. C. Drummond and S. S. Da Silva, 445.
- Cod Oil:** —; Definition of (Legal Notes). 475.
- Coefficient of Vulcanisation:** Vulcanised rubber; Estimation of free sulphur and the — in. W. J. Kelly, 313.
- Coffee:** Caffeine in Maté, —, tea, Kola-nuts and Guarana; Estimation of. T. Ugarte, 25.
- Coffee Essences:** Salicylic acid in —. 477.
- Coffee:** Ground —; An adulteration of. L. Gobert, 210.
- Coke:** Pitch —; Estimation of volatile combustible matter in. H. E. Lloyd and F. W. Yeager, 316.
- Coke Residue Test:** Creosote oils; — for. C. S. Reeve and F. W. Yeager, 531.
- Colchicine:** —; Isolation, assay and properties of. E. C. Davies and J. Grier, 523.
- Cold Storage:** Carnosine content of meat; Effect of — upon the. W. M. Clifford, 443.
- Colloids:** Hydrogen ion concentration in the precipitation of —; Role of. H. V. Tartar and Z. J. Gailey, 531.
- Colloidion Membranes:** Flexible —; Preparation of. J. M. Looney, 185.
- Colloid:** Gold as —; Colorimetric estimation of small quantities of. J. A. Müller and A. Foix, 452.
- Colombia:** Guere palm nuts from —. 124.
- Coloration:** Potato juice; — of. H. Haehn, 527.
- Colorimetric Comparison:** Buffer solution for —. T. C. McIlvaine, 89.
- Colorimetric Methods:** Dyes as standards in —; Use of. M. Takata, 32.
- Colostrum:** Camel's —; Composition of. H. L. Fales, 483.
- Colour Measurement:** Oils; Method of — for. L. W. Parsons and R. E. Wilson, 323.
- Colour Reaction:** *Gynocardia* oil and its spectrum; — of. I. Lifschutz, 125.
- Colour Reaction:** Urea; — for. V. Arreguine, junr., and E. D. Garcia, 309.
- Colour Reactions:** Cholesterol; — of. L. Kahlenberg, 364.
- Colour Reactions:** Nitro compounds; — of certain. O. Rudolph, 87.
- Colouring Matter:** Saffron; Identification of the — of. M. Guerbet, 481.
- Colours:** United States Department of Agriculture. Food Inspection Decision 184. — in Food. 438.
- Columbium:** Tantalum, —, and their mineral associates: I. Use of tartaric acid in the analysis of natural tantalocolumbates; II. Separation of zirconium from tantalum and from —. W. R. Schoeller and A. R. Powell, 93.
- Combustible Matter:** Pitch coke; Estimation of volatile — in. H. E. Lloyd and F. W. Yeager, 316.
- Committee:** Department of Scientific and Industrial Research. Adhesives Research —. First Report of the. 434.
- Committee:** Department of Scientific and Industrial Research. Sampling and Analysis of Coal —. 256.
- Committee:** Meteorological Office, Air Ministry. Advisory — on Atmospheric Pollution. Report on Observations in the Year Ending March 31st, 1921. 256.
- Complexes:** Uranyl and sodium; Characterisation of fatty acids by the formation of — with. J. Barlot and (Mdle.) M. T. Brenet, 132.
- Conductivity Titrations:** Lead nitrate; — by means of. J. M. Kolthoff, 453.
- Congo:** Copal oil. A new fat from the Belgian —. J. Pieraerts, 440.
- Constants:** Three dissociation — of citric acid; Determination of the. A. B. Hastings and D. D. Van Slyke, 489.
- Contact E.M.F.:** Steels by means of the —; Identification of. Galibourg, 183.
- Continuous-Flow:** Calorimeter. F. G. Keyes, L. J. Gillespie and S. Mitsukuri, 324.
- Copal Oil:** —. A new fat from the Belgian Congo. J. Pieraerts, 440.
- Copper Alloys:** Antimony and tin in —; Volumetric estimation of. F. J. Mück, 490.

- Copper**: Antimony in — and brass; The estimation of small quantities of. B. S. Evans, 1.
- Copper**: —, lead, antimony and tin; Separation and estimation of. Analysis of white metal. A. Kling and A. Lassieur, 134.
- Copper**: Highly sensitive reagent for —; the Kastle-Meyer reagent. P. Thomas and G. Carpentier, 90.
- Copper**: Metallic — and its oxides; Activation of water by means of. R. Wernicke and A. Sordelli, 311.
- Copper**: Potato plants; Absorption of — from the soil by. F. C. Cook, 84.
- Copper**: Salts; Rapid iodimetric estimation of — and iron in mixtures of their. I. W. Wark, 224.
- Copper Solutions**: Sucrose by alkaline —; Inversion of. M. L. Maquenne, 479.
- Copper**: Titrating —; Method for. S. Minovici and A. Jonescu, 270.
- Copper**: Trivalent titanium. II. — and iron in presence of each other; Estimation of. W. M. Thornton, 320.
- Corleis' Method**: Carbon in cast iron and steel by —; Estimation of. G. Batta and H. Thyssen, 271.
- "Cotton-Wool Plug Test"**: Indole; The — for. S. N. Gore, 307.
- County Analyst**: Somerset County Council. Annual Report of the — and Bacteriologist for the Year 1921. D. R. Wood, 349.
- Cow**: Vitamins *A* and *B* in the milk; Influence of the diet of the — upon the quantity of. C. Kennedy and R. A. Dutcher, 216.
- Cow's Milk**: Amino-acids in —; Occurrence of. Y. Hijikata, 264.
- Cow's Milk**: Soya bean albumin in —; Detection of. K. Nakayasu, 398.
- Cow's Milk**: Starch; Destructive action of the amylase of — upon various kinds of. F. Welmuller, 305.
- Cow's Milk**: Sudan; The composition of — in the. A. F. Joseph and F. J. Martin, 426.
- Cracked Gasolines**: Unsaturated hydrocarbons and —; Iodine values of. W. F. Faragher, W. A. Gruse and F. H. Garner, 86.
- Cream**: Formaldehyde; — containing (Legal Notes), 513.
- Creatinine**: Meat extract; Preparation of — from. H. Stendel, 174.
- Creosote Oils**: Coke residue test for —. C. S. Reeve and F. W. Yeager, 531.
- Creosote**: Wood preservation; Standard specification for — for. (British Engineering Standards Association.) 71.
- n*- and *p*-Cresols**: Coal-tar crude carbolic acid; Separation of — from. A. F. Campbell, 451.
- Cryoscopy**: Milk; — of. E. M. Bailey, 519.
- Crystalline Iodobismuthates**: Alkaloids; Method for the preparation of — of. M. François and L. G. Blanc, 440.
- Crystalline Iodomercuriates**: Alkaloids; Method for the preparation of — of. M. François and L. G. Blanc, 440.
- Crystals**: Alkaloids under the microscope from the form of their picrate —; Identification of. B. E. Nelson and H. A. Leonard, 212.
- Crystals**: Opaque —; Photomicrography of. M. François and C. Lormand, 94.
- Crystals**: Stereoscopic micrography of —. M. François and C. Lormand, 94.
- Culture**: Original diagnostic — for determining the virulence of diphtheria bacilli; Use of the. L. C. Havens and H. M. Powell, 359.
- Cuprous Oxide**: Fehling solution; Estimation of sugar by titration with alkali hydroxide of the — obtained from. A. Hanak, 75.
- Curcass**: Oil. 125.
- Cystine**: Tyrosine, tryptophane and — in proteins; Colorimetric estimation of. O. Folin and J. M. Looney, 359.

D

- Dakamballi**: Starch (Notes). J. A. Goodson, 205.
- Dangerous Drugs**: — (Public Analysts in Scotland) Order, 1922. 352.
- Daylight**: Laboratory purposes (Sheringham System); The application of artificial — to. S. H. Groom, 419.
- Daylight Lamp**: Volumetric and colorimetric analysis; The use of the — in. W. Singleton, 424.
- De-Acetication**: Wines; — [Dépiquage] of. L. Ferré, 401.
- Decomposition Products**: Protein materials and their —; Estimation of ammoniacal nitrogen in nitrogenous organic substances, especially in. J. Froidevaux, 308.
- Department of Scientific and Industrial Research**: —. Adhesives Research Committee; First Report of the. 434.
- Department of Scientific and Industrial Research**: —. Food Investigation Board. Report on Heat Insulators. 119.
- Department of Scientific and Industrial Research**: —; Food Investigation Board. The Bacteriology of Canned Meat and Fish. 313.
- Department of Scientific and Industrial Research**: —. Food Investigation Board. The Methods Used for the Inspection of Canned Foods. Part II., Canned Marine Products. 350.
- Department of Scientific and Industrial Research**: —. Food Investigation Board. The Preservation of Food by Freezing, with Special Reference to Fish and Meat. 392.
- Dessicated Orange Juice**: Antiscorbutic Vitamin C from —; Solubility of the. E. B. Hart, H. Steenbock and S. Lepkovsky, 357.
- Device**: Flask calibrating and marking —. G. L. Spencer, 94.
- Dextrose**: Dialysis of sucrose through a parchment membrane; Influence of — on the L. A. Congdon and H. R. Ingersoll, 170.
- Dextrose**: Sucrose in the presence of —; Test for. L. A. Congdon and C. R. Stewart, 123.
- Diabetics**: Foods for —. E. M. Bailey, 517.

- Diagnostic Culture:** Diphtheria bacilli; Use of the original — for determining the virulence of. L. C. Havens and H. M. Powell, 359.
- Dialysis:** Sucrose through a parchment membrane; Influence of dextrose on the — of. L. A. Congdon and H. R. Ingersoll, 170.
- Dichromate:** Ferrous sulphate; Electrometric titration of — with. M. Eppley and W. C. Vosburgh, 537.
- Digestibility:** Raw starches; — of. C. F. Langworthy and H. J. Deuel, junr., 356.
- Digestive Properties:** Philippine papain; — of. H. C. Brill and R. E. Brown, 444.
- Diluents:** Flour and bread; Detection and estimation of — in. E. Vogt, 74.
- Dilution:** Acids to a desired strength; — of (Notes). J. C. Philip, 67.
- Diphenyl-Guanidine:** Standard in acidimetry and alkalimetry; Symmetrical — as a. C. A. Carlton, 408.
- Diphtheria Bacilli:** Virulence of —; Use of the original diagnostic culture for determining the. L. C. Havens and H. M. Powell, 359.
- Diss:** Ergot of — and ergot of oats; Chemical composition of. G. Tanret, 213.
- Dissociation Constants:** Citric acid; Determination of the three — of. A. B. Hastings and D. D. Van Slyke, 489.
- Distillation:** Frothing during —; Prevention of. Klanhardt, 372.
- Distillation Method:** Arsenic by the —; Errors caused by nitrates and nitrites in the estimation of, and a means for their prevention. J. J. T. Graham and C. M. Smith, 318.
- Dog-Fish Oil:** Spined — T. Lexow, 439.
- Dominion Chemist:** Dominion of Canada. Department of Agriculture. Interim Report of the — for the year ending March 31, 1921, 168.
- Dominion of Canada:** Department of Agriculture Interim Report of the Dominion Chemist for the year ending March 31, 1921. 168.
- Dough:** Carbon dioxide from — as an index of flour strength; Loss of. C. H. Bailey and M. Weigley, 258.
- Dragon Tree:** Roots of the —. T. Steel, 210.
- Drinking Water:** Nitric acid in — by Mayrhofer's method; Estimation of. A. Reuss, 311.
- Drugs:** Dangerous —. (Public Analysts in Scotland) Order, 1922. 352.
- Drying Agent:** Magnesium perchlorate as a —. H. H. Willard and G. F. Smith, 538.
- Drying:** Properties of substances on —; Change of. H. B. Baker, 321.
- Dulcin:** — (*p*-phenetolecarbamide); Microchemical reactions of. G. Denigès and R. Tourrou, 79.
- Duralumin:** Aluminium alloys and especially of —; Analysis of. E. M. da Costa-Vet, 368.
- Durham Coals:** Agglutinating value of some —. A. Weighell, 180.
- Dyes:** Azo —; Electrometric titration of. D. O. Jones and H. R. Lee, 222.
- Dyes:** Standards in colorimetric methods; Use of — as. M. Takata, 32.
- Dyestuffs:** Chemical constitution and antiseptic action in the coal-tar —; Relation between. T. H. Fairbrother and A. Renshaw, 307.

E

- Earth Metals:** Alkaline —; Qualitative separation of. M. Polonovsky, 491.
- Edible Birds'-Nests:** Amino sugar of Chinese —; Isolation and nature of the. C. C. Wang, 123.
- Edible Birds'-Nests:** Chinese —; Composition of, and nature of their proteins. C. C. Wang, 122.
- Edible Fats:** Artificial —. R. Escales and F. Schlesinger, 171.
- Edible Oils and Fats:** Nutritive value of —. Oil-bearing seeds and crude vegetable oils and fats. J. C. Drummond and S. S. Silva, 306.
- Egg:** Hen's —; Sugar content of the. J. S. Hepburn and E. Q. St. John, 171.
- Egg Lecithin:** Unsaturated fatty acids of —. P. A. Levene and I. P. Rolf, 356.
- Egg Substance:** Cakes; Detection of — in. O. Noetzel, 122.
- Egypt:** Ancient and Modern —; The inks of. A. Lucas, 9.
- Egyptian Food:** Taamya (an —); Composition of. A. Azadian, 478.
- Egyptian Goats' Milk:** Fat obtained from —. A. Azadian, 352.
- Elderberry:** Wine. J. Prescher and R. Claus, 480.
- Electric Thermostat:** — constant to 0.02° C.; Improvised. S. C. Bradford, 272.
- Electro-Analysis:** Brass; Rapid — of. A. and Mme. A. Lassieur, 36.
- Electrode:** Hydrogen —; Improved. C. W. G. Hetterschij, 413.
- Electrodes:** Rapid electrolysis without rotating —; Apparatus for. G. Edgar and R. B. Purdum, 371.
- Electrolysis:** Rapid — without rotating electrodes; Apparatus for. G. Edgar and R. B. Purdum, 371.
- Electrometric Methods:** Mercuric perchlorate in — of analysis; Use of. I. M. Kolthoff, 411.
- Electrometric Titration:** Azo dyes; — of. D. O. Jones and H. R. Lee, 222.
- Electrometric Titration:** Chromium in ferromagnesium by —; Estimation of. G. L. Kelley and J. A. Wiley, 92.
- Electrometric Titration:** Dichromate with ferrous sulphate; — of. M. Eppley and W. C. Vosburgh, 537.
- Electrometric Titration:** Uranium with potassium permanganate and potassium dichromate; — of. D. T. Ewing and E. F. Eldridge, 409.
- Electro-Volumetric Estimation:** Lead; — of. D. A. MacInnes and E. B. Townsend, 366.
- Emanation Method:** Thorium in monazite sand by an —; Estimation of. H. H. Helmick, 136.

- Emmenagogues:** — and similar preparations; Composition of. C. Griebel, 441.
- Enzymes:** Abdominal adipose tissue of the turkey; — of the. J. S. Hepburn, 81.
- Ergot:** — of diss and — of oats; Chemical composition of. G. Tanret, 213.
- Errata:**
Vol. XLVI., 1921. P. 489, line 40, or "digestion" read "dejection."
Vol. XLVII., 1922.
P. 50, for "1882" read "1881."
P. 50, for "108" read "231."
P. 50, for "1895" read "1894."
P. 50, for "1884" read "1883."
P. 92, line 17, for "41" read "42."
P. 148, line 32, for "0.5 N potassium hydroxide solution" read "0.5 N hydroxylamine hydrochloride solution."
Pp. 487, 488, lines 41 and 10, 13 for "Gallit m" read "Galium."
- Errors:** Arsenic by the distillation method; — caused by nitrates and nitrites in the estimation of, and a means for their prevention. J. J. T. Graham and C. M. Smith, 318.
- Erucic:** Acid. D. Holde and C. Wilke, 447.
- Essences:** Coffee —; Salicylic acid in. 477.
- Essential Oil:** Naal grass (Sudan); — of. A. F. Joseph and B. W. Whitfield, 314.
- Essential Oils:** Reagents for —; Hydroferrocyanic and hydroferricyanic acids as. Van der Wielen, 402.
- Esters:** Imitation flavouring extracts; Estimation of — in. G. F. Beyer, 302.
- Ethyl Alcohol:** Solvent; Titrations in — as. E. R. Bishop, E. B. Kittredge and J. H. Hildebrand, 220.
- Eucalyptus Oils:** Certain —; Aromatic aldehydes occurring in. A. R. Penfold, 214.
- Explosion and Slow Combustion Methods:** Oxides of nitrogen in the — in gas analyses; Formation of. G. W. Jones and W. L. Parker, 133.
- Explosives:** Degree of incorporation of — and other powders; Method of testing the. E. P. Perman, 369.
- Extract:** Carnosine in muscle —; Estimation of. G. Hunter, 266.
- Extract:** Creatinine from meat —; Preparation of. H. Stendel, 174.
- Extract of Belladonna:** Alkaloids contained in —. A. Goris and P. Costy, 522.
- F**
- Fat:** Butter; Modified Babcock Method for determining — in. N. W. Hepburn, 74.
- Fat:** Egyptian goats' milk; — obtained from. A. Azadian, 352.
- Fat-Soluble Factor:** — (Vitamin A); Quantitative estimation of the. S. S. Zilva and M. Miura, 267.
- Fat-Soluble Vitamin A:** Plant pigments; Occurrence of — in relation to. H. Steenbock and M. T. Sell, 267.
- Fats:** Edible oils and —; Nutritive value of. Oil-Bearing seeds and crude vegetable oils and —. J. C. Drummond and S. S. Zilva, 306.
- Fats:** Hardened —; Absorption of water by. K. Brauer, 480.
- Fats:** Impurities in —; New apparatus for the estimation of. Somazzi, 178.
- Fats:** Oils and — from chrome-leather; Extraction of. D. Woodroffe, 221.
- Fats:** Oils and —; Relation between the refractive index and chemical characteristics of. G. F. Pickering and G. E. Cowlshaw, 220.
- Fats:** Uncommon animal —; Two (Notes). W. N. Rae, 510.
- Fatty Acids:** Egg lecithin; Unsaturated — of. P. A. Levene and I. P. Rolf, 356.
- Fatty Acids:** Liver lecithin; Unsaturated — of. P. A. Levene and H. S. Simms, 356.
- Fatty Acids:** Uranyl and sodium; Characterisation of — by the formation of complexes with. J. Barlot and (Mdlle.) M. T. Brenet, 132.
- Fehling Solution:** Sugar by titration with alkali hydroxide of the cuprous oxide obtained from —; Estimation of. A. Hanak, 75.
- Fehling's Solution:** Reducing sugars by —; Quantitative estimation of. Elimination of certain errors. F. A. Quisumbing and A. W. Thomas, 27.
- Ferric Oxide:** Lime by the nitrate method; Separation of — and alumina from. Charriou, 271.
- Ferric Sulphate:** Sulphides by oxidation with —; Estimation of. P. P. Budnikov and K. E. Krauze, 492.
- Ferrochromium:** Chromium in — by electro-metric titration; Estimation of. G. L. Kelley and J. A. Wiley, 92.
- Ferrocyanide:** Potentiometric titration of —. E. Müller and H. Lauterbach, 453.
- Ferrocyanide Titration:** Metals; Influence of alkali metals on the — of certain. W. D. Treadwell and D. Chervet, 535.
- Ferro-Tungsten:** —; Rapid analysis of. L. Losana and E. Carozzi, 490.
- Ferrous Products:** Titanium in —; Estimation of. L. Losana and E. Carozzi, 536.
- Ferrous Sulphate:** Dichromate with —; Electro-metric titration of. M. Eppley and W. C. Vosburgh, 537.
- Ferruginous Tin Alloys:** —; Analysis of. A. Meyer, 224.
- Fertiliser Research Committee:** Report of the —. (Method for the estimation of nitric and nitrous nitrogen.) H. Neubauer, 85.
- Fertilisers and Feeding Stuff Act:** Quarter ended September 30, 1921; Report of the Kent County Analyst under the —, for the. F. W. F. Arnaud, 69.
- "Fine Chemicals":** —; The term (Notes). C. A. Hill, 118.
- Fish:** Chilled brine; Preservation of — frozen in. L. H. Almy and E. Field, 306.
- Fish:** Department of Scientific and Industrial Research. Food Investigation Board. Canned meat and —; The Bacteriology of. 513.

- Fish**: Department of Scientific and Industrial Research. Food Investigation Board. The Preservation of Food by Freezing, with Special Reference to — and Meat. 392.
- Fish-Scales**: Fish used in manufactured products; The value of — as a means of identification of the. R. E. Essery, 163.
- Flask**: Calibrating and marking device. G. L. Spencer, 94.
- Flavouring Extracts**: Esters in imitation —; Estimation of. G. F. Beyer, 302.
- Flesh**: Amino-Acids of —. J. L. Rosedale, 265.
- Flora**: Maize meal; — of. C. Thom and E. Le Fevre, 83.
- Flour**: Acidity of —; Estimation of the. Arpin and M. T. Pecaud, 516.
- Flour**: Carbon dioxide in self-raising —; Estimation of. B. R. Jacobs, 352.
- Flour**: Diluents in — and bread; Detection and estimation of. E. Vogt, 74.
- Flour**: Self-raising —; Lead in (Notes). N. T. Fox, 468.
- Flour Strength**: Index of —; Loss of carbon dioxide from dough as an. C. H. Bailey and M. Weigley, 258.
- Fluorine**: Estimating — in the cold; New method for. Travers, 35.
- Folin's Colorimetric Method**: Uric acid; Modification of — for the estimation of. H. Jackson and W. W. Palmer, 176.
- Folin-Wu and Benedict Methods**: Blood sugar estimations; Comparison of the — for. F. A. Csonka and G. C. Taggart, 528.
- Food and Drugs Acts**: Association of Public Analysts of Scotland on Administration of —; Memorandum from. 297.
- Food and Drugs Acts**: Ministry of Health. Sale of. 69.
- Food and Drugs Analysis, Abstracts**: 1922: 24, 73, 122, 170, 210, 258, 300, 352, 397, 439, 477, 516.
- Food Control**: Statutory Rules and Orders, 1921, No. 1883. —. F. H. Collier, 71.
- Food**: Department of Scientific and Industrial Research. — Investigation Board. The Preservation of — by Freezing, with Special Reference to Fish and Meat. 392.
- Food Inspection**: United States Department of Agriculture. — Decision 184. Colours in Food. 438.
- Food Investigation Board**: Department of Scientific and Industrial Research. —. Report on Heat Insulators. 119.
- Food Investigation Board**: Department of Scientific and Industrial Research. —. The Bacteriology of Canned Meat and Fish. 513.
- Food Investigation Board**: Department of Scientific and Industrial Research. —. The Methods Used for the Inspection of Canned Foods. Part II., Canned Marine Products. 350.
- Food Investigation Board**: Department of Scientific and Industrial Research. —. The Preservation of Food by Freezing, with Special Reference to Fish and Meat. 392.
- Food Orders**: Ministry of Health. — in Force. Circular 325 (England and Wales). A. K. Maclachlan, 396.
- Food**: Taamya (an Egyptian —); Composition of. A. Azadian, 478.
- Food**: United States Department of Agriculture. — Inspection Decision 184. Colours in —. 438.
- Foods**: Chemical —; Examination of. A. J. Jones, 127.
- Foods**: Department of Scientific and Industrial Research. Food Investigation Board. The Methods Used for the Inspection of Canned —. Part II., Canned Marine Products. 350.
- Foods**: Diabetics; — for. E. M. Bailey, 517.
- Foods**: Examination of —; Microanalytical methods in the. F. Wohack, 126.
- Foods**: Hydrogen sulphide evolved by — when cooked at various temperatures; Estimation of. E. E. Kohman, 397.
- Foods**: Sulphites; Note on the examination of — for the presence of. A. C. Chapman, 204.
- Foodstuff**: Gelatin as a —. R. Robison, 263.
- Foodstuffs**: Indian —; Vitamin content of some. S. N. Ghose, 267.
- Foodstuffs**: Amino acids in —; Estimation of. T. S. Hamilton, W. B. Nevens, and H. S. Grindley, 33.
- Foodstuffs**: Observed and calculated heat values of —; Relation between the. J. König and J. Schneiderwirth, 79.
- Foodstuffs**: Vitamins; The testing of — for. J. C. Drummond and A. F. Watson, 235.
- Formaldehyde**: Cream containing — (Legal Notes). 513.
- Formaldehyde Hydrosulphite**: Method of preparing —; New. P. Malvezin, C. Rivaland and L. Grandchamp, 85.
- Formic Acid**: Carrier of —; The bee's body as a. T. Merl, 76.
- Formula**: Specific heats of solids; Simple — for the calculation of the. H. J. Krase, 322.
- Formulae**: Starch syrup and sucrose in fruit juices, jams, etc.; — for the direct calculation of. A. Rinck, 171.
- Foxglove**: Polish —; Investigations of. J. Muszynski, 28.
- Fractionation**: Receiver for — in a current of gas or under reduced pressure; A. T. S. Wheeler and E. W. Blair, 227.
- Free Acid**: Aluminium sulphate solutions; Estimation of — in. H. Zschokke and L. Häuselmann, 270.
- Free and Combined Carbon Dioxide**: Estimation of — (in waters); Method for the. J. A. Shaw, 130.
- Freezing**: Department of Scientific and Industrial Research. Food Investigation Board. The Preservation of Food by —, with Special Reference to Fish and Meat. 392.
- Frothing**: Distillation; Prevention of — during. Klanhardt, 372.
- Fructose**: Aldoses; Detection of — in the presence of. I. M. Kolthoff, 301.

- Fruit:** Certain field-weeds; The seeds and — of. J. Greger, 487.
- Fruit Juices:** Starch syrup and sucrose in —, jams, etc.; Formulae for the direct calculation of. A. Rinck, 171.
- Fruits:** Australian —; Analyses of some. T. Steel, 210.
- Fuel Naphtha:** Calorific value of —; Indirect determination of the. G. Morpurgo, 179.
- Fuller's Earth:** Vitamin-activated —; Preparation of. A. Seidell, 357.
- Fungi:** Urease and urea in —. A. Goris and P. Costy, 527.
- Furfural:** Small quantities of —; Colorimetric method for estimating. P. Fleury and G. Poirot, 448.
- Furfural:** Orcinol test for —; The. E. J. Mueller, 34.
- Fusaria Rots:** Potato; — of the. R. W. Cross, 32.
- Fusibility:** Coal ash; Comparison of the standard gas furnace and micropyrometer methods for determining the — of. A. C. Fieldner, W. A. Selvig and W. L. Parker, 449.
- G**
- Gas Analyses:** Slow combustion and explosion methods in —; Formation of oxides of nitrogen in the. G. W. Jones and W. L. Parker, 133.
- Gas Analysis:** Technical —; Apparatus for. H. M. Lowe, 133.
- Gas Furnace and Micropyrometer Methods:** Fusibility of coal ash; Comparison of the standard — for determining the. A. C. Fieldner, W. A. Selvig and W. L. Parker, 449.
- Gaseous Nitrogen Oxides:** Alkaline solutions; Reactions between — and. A. Sanfourche, 536.
- Gaseous Oxygen:** Minute amounts of —; Quantitative estimation of. H. M. Sheaff, 365.
- Gases:** Blood; Estimation of the — of the. D. D. Van Slyke and W. C. Stadie, 83.
- Gases:** Suspended impurities in —; Estimation of. W. W. Scott, 372.
- Gasolines:** Unsaturated hydrocarbons and cracked —; Iodine values of. W. F. Faragher, W. A. Gruse and F. H. Garner, 86.
- Gasometric Estimation:** Urea; — of. R. H. Stehle, 268.
- Gelatin:** Foodstuff; — as a. R. Robison, 263.
- Gelatin:** — and glue; Evaluation of. R. H. Bogue, 364.
- German Regulations:** Spirits of Wine; — for the Denaturation of. 300.
- Germanium:** Arsenic; Separation of — and. J. H. Müller, 182.
- Germination:** Germinative capacity otherwise than by —; Determination of. P. Lesage, 216.
- Gidgee Wattle:** Calcium oxalate in —; Occurrence of. T. Steel, 89.
- Glacial Acetic Acid Method:** Uranium in carnottite; — for estimating. W. W. Scott, 410.
- Glacial Acetic Acid:** Water-soluble Vitamin B; — as solvent for. V. E. Levine, E. V. McCollum and N. Simmonds, 444.
- Glass Bottles:** Soft water; Action of — on (Notes). J. F. Liverseege and E. M. Milward, 67.
- Glass:** Joining pyrex to lead —; Graded seal for. W. C. Taylor and A. Bailey, 137.
- Glassware:** Grading of chemical —; Autoclave test for the. W. L. Baillie and F. E. Wilson, 226.
- Globulin Precipitant:** Sodium sulphate as the — in the determination of proteins in blood; Use of. P. E. Howe, 128.
- Glucose:** P_H value of commercial — as a substitute for the "candy" test; Determination of the. O. A. Sjostrum, 520.
- Glue:** Gelatin and —; Evaluation of. R. H. Bogue, 364.
- Gluten:** Wheat —. J. Gerum and C. Weizenleber, 477.
- Glycerides:** Goose fat; — of. A. Bömer and H. Merten, 260.
- Glycerides:** Goose-fat; — of. C. Amberger and K. Bromig, 75.
- Glycerin:** Trimethyleneglycol in crude —; Estimation of. L. V. Cocks and A. H. Salway, 131.
- Glycerol:** Sugars; Estimation of — in the presence of. L. F. Hoyt and H. V. Pemberton, 172.
- Goats' Milk:** Egyptian —; Fat obtained from. A. Azadian, 352.
- Gold:** Small quantities of — as colloid; Colorimetric estimation of. J. A. Müller and A. Foix, 452.
- Golden Sulphide of Antimony:** Available sulphur in —; Estimation of. B. D. W. Luff and B. D. Porritt, 90.
- Goose Fat:** Glycerides of —. A. Bömer and H. Merten, 260.
- Goose-Fat:** Glycerides of —. C. Amberger and K. Bromig, 75.
- Government Analytical Laboratory:** —, Cairo. Report of the Director for the Year 1920. 21.
- Government Chemist:** Work of the Government Laboratory for the year ending March 31, 1922; Report of the — upon the. 471.
- Government Laboratory:** Government Chemist upon the Work of the — for the year ending March 31, 1922; Report of the. 471.
- Government of Madras:** Report of the Chemical Examiner for 1921. 433.
- Grading:** Chemical glassware; Autoclave test for the — of. W. L. Baillie and F. E. Wilson, 226.
- Grape Juice:** Methyl anthranilate in —; Occurrence of. F. B. Power and V. K. Chesnut, 26.
- Graphites:** Pencil pigments; — and other. C. A. Mitchell, 379.
- Grass:** Naal — (Sudan); Essential oil of. A. F. Joseph and B. W. Whitfield, 314.

- Ground Coffee:** Adulteration of —; An. L. Gobert, 210.
- Guanidine:** —; Estimation of. A. H. Dodd, 310.
- Guarana:** Caffeine in Maté, coffee, tea, Kolanuts and —; Estimation of. T. Ugarte, 25.
- Guere Palm Nuts:** Colombia; — from. 124.
- Gynocardia Oil:** Spectrum; Colour reaction of — and its. I. Lifschutz, 125.
- H-Acid:** —; Estimation of. H. R. Lee, 86.
- H**
- Haemoglobin:** —; Colorimetric estimation of. E. H. Terrill, 445.
- Halides:** Potassium ferrocyanide on silver —; Action of. G. B. Bonino, 39.
- Hardened Fats:** Water by —; Absorption of. K. Brauer, 480.
- Hay:** Self-Heating of —. G. Laupper, 29.
- Hazel Nut Oil:** Arachidic acid; — and estimation of. J. Pritzker and R. Jungkunz, 124.
- Heat:** Antiscorbutic vitamin in the presence of invertase; Effect of — upon the. E. Smith and G. Medes, 30.
- Heat:** *Cocculus Indicus*; Effect of — upon, and identification of picrotoxin. D. S. Kabayao, 355.
- Heat Insulators:** Department of Scientific and Industrial Research. Food Investigation Board. Report on —. 119.
- Heat Values:** Foodstuffs; Relation between the observed and calculated — of. J. König and J. Schneiderwirth, 79.
- Hen's Egg:** Sugar content of the —. J. S. Hepburn and E. Q. St. John, 171.
- Homogentisic Acid:** Urine; Colorimetric estimation of — in. A. P. Briggs, 310.
- Honey:** Honeycomb; Vitamin content of — and. P. B. Hawk, C. A. Smith and O. Bergein, 30.
- Honey:** Technical invert sugar in — with resorcinol or β -naphthol; A simple test for. F. M. Litterscheid, 76.
- Honeycomb:** Honey and —; Vitamin content of. P. B. Hawk, C. A. Smith and O. Bergein, 30.
- Human Saliva:** Hydrogen ion concentration of —. H. E. Starr, 529.
- Human Urine:** Sugar in normal —; Colorimetric method for the estimation of. O. Folin and H. Berglund, 268.
- Humus:** Chromic acid; Estimation of — by means of. A. Gehring, 361.
- Hydrated Oxalic Acid:** Oxidimetric standard; — as an. A. E. Hill and T. M. Smith, 269.
- Hydrocarbon:** Rubber —; The tetrabromide method for estimating. H. L. Fisher, H. Gray and R. Merling, 87.
- Hydrocarbons:** Molecular properties of certain — and their capacity for fixing iodine; Relation between the. P. Woog, 132.
- Hydrocarbons:** Naturally occurring sulphurised —; Sulphonated derivatives of. C. Pepin and G. Reaubourg, 525.
- Hydrocarbons:** Unsaturated — and cracked gasolines; Iodine values of. W. F. Faragher, W. A. Gruse and F. H. Garner, 86.
- Hydrocyanic Acid:** Tests for —; Sensitiveness of. T. Sundberg, 215.
- Hydroferricyanic and Hydroferrocyanic Acids:** Essential oils; — as reagents for. Van der Wielen, 402.
- Hydroferrocyanic and Hydroferricyanic Acids:** Essential oils; — as reagents for. Van der Wielen, 402.
- Hydrofluoric acid:** Measuring —; Apparatus of transparent Bakelite for. L. J. Curtmann, 493.
- Hydrogen:** Carbon and — by means of the sulphuric-chromic mixture; Estimation of. L. J. Simon and A. J. A. Guillaumin, 530.
- Hydrogen:** Carbon monoxide in —; Preferential catalytic combustion of. A. R. Lamb, C. C. Scallione and G. Edgar, 316.
- Hydrogen Electrode:** Improved —. C. W. G. Hetterschij, 413.
- Hydrogen Electrode Standards:** Phthalate solutions for —; Use of. E. T. Oakes and H. M. Salisbury, 312.
- Hydrogen Ion Concentration:** Blood; Colorimetric estimation of — in small quantities of. J. Lindhard, 128.
- Hydrogen Ion Concentration:** Human saliva; — of. H. E. Starr, 529.
- Hydrogen Ion Concentration:** Indicators without buffer solutions; Determination of — in water by means of. L. Michaelis, 89.
- Hydrogen Ion Concentration:** Natural waters; — of some. J. T. Saunders, 130.
- Hydrogen Ion Concentration:** Precipitation of colloids; Role of — in the. H. V. Tartar and Z. J. Gailey, 531.
- Hydrogen Ion Concentration:** Water; Active carbon dioxide and — in the examination of. J. M. Kolthoff, 311.
- Hydrogen:** Oxygen in —; Estimation of traces of. A. T. Larsen and E. C. White, 223.
- Hydrogen:** Palladium chloride; Estimation of — and its separation from paraffins by means of. J. A. Müller and A. Foix, 451.
- Hydrogen Peroxide:** Blood with nascent —; The reaction of. A. Patzauer, 32.
- Hydrogen Peroxide:** Decomposition of plant and animal substances by Kjeldahl's method; Influence of — on the. Kleeman, 34.
- Hydrogen Peroxide:** —; Colorimetric estimation of. M. L. Isaacs, 490.
- Hydrogen Peroxide:** Preservatives; Commercial — containing. P. Poetschke, 304.
- Hydrogen Sulphide:** Foods when cooked at various temperatures; Estimation of — evolved by. E. E. Kohman, 397.
- Hydrogen Sulphide:** Iron and vanadium after reduction by —; Estimation of. G. E. F. Lundell and H. B. Knowles, 37.
- Hydrogenation:** Pressure; Apparatus for — at high temperatures without. J. Klimont, 228.
- Hydrolysis:** Atropine in toxicological investigations; Volatilisation and — of. P. Hardy, 482.

- Hydrolysis**: Monoamino acids formed by the — of lactalbumin; Estimation of the. D. B. Jones and C. O. Johns, 30.
- Hydrolysis**: Proteins, etc.; Separation of amino-acids from the products of — of. H. W. Buston and S. B. Schryver, 264.
- Hydrosulphurous and Sulphoxylic Acids**: —; Estimation of. F. De Bacho, 184.
- Hydrosulphurous and Sulphoxylic Acids**: —; Iodimetric estimation of. F. de Bacho, 369.
- Hydroxides**: Sucrose in the presence of other carbohydrates by means of alkaline earth —; Estimation of. A. Behre and A. Düring, 478.
- β -Hydroxy-Butyric Acid**: —; Estimation of. R. S. Hubbard, 130.
- p -Hydroxy Phenylcarbamide Derivatives**: Sweetening power of —. C. Speckan, 525.
- Hydroxylamine**: Aldehydes and ketones by means of —; The estimation of. A. H. Bennett and F. K. Donovan, 146.
- Hydroxylamine Hydrochloride**: Potable spirits by means of —; Estimation of acetone in. G. Reif, 77.
- Hyocyamine**: Sulphate; Preparation and racemisation of — and its. A. Goris and P. Costy, 522.
- Hypnotic Derivatives**: Veronal and — of barbituric acid and its applications; A reaction of. R. Fabre, 523.
- Hypobromite Estimation**: Urea in urine; — of. M. Janet, 486.
- I**
- Identification Tests**: Neo-arsphenamine; — for. L. Kofler and A. Perutz, 525.
- Imitation Flavouring Extracts**: Esters in —; Estimation of. G. F. Beyer, 302.
- Immature Feeding Salmon**: —; Decomposition of. A. C. Hunter, 443.
- Impurities**: Fats; New apparatus for the estimation of — in. Somazzi, 178.
- Impurities**: Gases; Estimation of suspended — in. W. W. Scott, 372.
- Impurity**: Air; Suspended — in the. J. S. Owens, 322.
- Incorporation**: Degree of — of explosives and other powders; Method of testing the. E. P. Perman, 369.
- Incrustations**: Plant —. E. Schmidt and Duysen, 314.
- Incubation Temperature**: Bacteria counts from milk as affected by media and —; Variations in. G. C. Suplee, W. A. Whiting and P. A. Downs, 485.
- Indian Beeswax**: Constants of —; The. O. D. Roberts and H. T. Islip, 246.
- Indian Foodstuffs**: Vitamin content of some —. S. N. Ghose, 267.
- Indicator**: Chemical and biochemical work; Xylenol blue as an — in. A. Cohen, 269.
- Indicator Solution**: Starch —; A. (Notes). W. J. Painter, 166.
- Indicator**: Universal —; Demonstration of the use of a. F. H. Carr, 196.
- Indicators**: Alkaloids; New — for. W. J. McGill, 533.
- Indicators**: Buffer solutions; Determination of hydrogen ion concentration in water by means of — without. L. Michaelis, 89.
- Indicators**: Mixed —; Use of. A. Cohen, 489.
- Indol**: *B. Coli*; Influence of peptone on the formation of — by. F. W. Tilley, 174.
- Indole**: "Cotton-wool plug test" for —; The. S. N. Gore, 307.
- Inks**: Ancient and modern Egypt; The — of. A. Lucas, 9.
- Inorganic Analysis, Abstracts**: 1922: 35, 89, 134, 181, 223, 269, 316, 365, 408, 451, 489, 533.
- Inorganic Phosphorus**: Serum; Colorimetric estimation of — in small quantities of. F. F. Tisdall, 218.
- The Institute of Chemistry of Great Britain and Ireland**: 1922: 100, 418, 544.
- Insulating Oils**: Moisture in —; Estimation of. C. J. Rodman, 178.
- International Committee**: Atomic Weights; — on. Twenty-eighth Annual Report. 208.
- International Union**: Pure and Applied Chemistry; — of. Second Conference. 20.
- International Union**: Pure and Applied Chemistry; — of. Third International Conference. 207.
- Invert Sugar**: Honey with resorcinol or β -naphthol; A simple test for technical — in. F. M. Litterscheid, 76.
- Invertase Activity**: Yeast; Effect of stimulants upon the — of. E. W. Miller, 82.
- Invertase**: Antiscorbutic vitamin in the presence of —; Effect of heat upon the. E. Smith and G. Medes, 30.
- Iodates**: Potassium iodide; Detection of — in. M. Lachartre, 480.
- Iodide**: Tin as —; Detection of. H. Heller, 367.
- Iodimetric Estimation**: Iron; — of. I. M. Kolthoff, 36.
- Iodimetric Estimation**: Lead peroxide; Direct — of. S. Glasstone, 90.
- Iodimetric Standard**: Oxalic acid as an —. L. Rosenthaler, 365.
- Iodine and Bromine Values**: Petroleum products; — of. E. M. Johansen, 315.
- Iodine**: Chemical measurements; Comparative values of different specimens of — for use in. C. W. Foulk and S. Morris, 223.
- Iodine**: Molecular properties of certain hydrocarbons and their capacity for fixing —; Relation between the. P. Woog, 132.
- Iodine Values**: Unsaturated hydrocarbons and cracked gasolines; — of. W. F. Faragher, W. A. Gruse and F. H. Garner, 86.
- Iodobismuthates**: Alkaloids; Method for the preparation of crystalline — of. M. François and L. G. Blanc, 440.
- Iodomercuriates**: Alkaloids; Method for the preparation of crystalline — of. M. François and L. G. Blanc, 440.
- Iron**: Aluminium and — by means of *o*-phenetidine; Separation of. K. Chalupny and K. Breisch, 491.

- Iron:** Blood; New quantitative method for the estimation of — in the. A. L. Brown, 217.
- Iron:** Copper and — in mixtures of their salts; Rapid iodimetric estimation of. I. W. Wark, 224.
- Iron:** — and vanadium after reduction by hydrogen sulphide; Estimation of. G. E. F. Lundell and H. B. Knowles, 37.
- Iron:** Manganese; Separation of — and. M. Carus, 92.
- Iron:** —; Iodimetric estimation of. I. M. Kolthoff, 36.
- Iron:** Manganese, — and cobalt; Reaction of. D. Baralew, 36.
- Iron:** Trivalent titanium. II., Copper and — in presence of each other; Estimation of. W. M. Thornton, 320.
- Isolation:** Colchicine; —, assay and properties of. E. C. Davies and J. Grier, 523.
- J**
- Jams:** Starch syrup and sucrose in fruit juices, —, etc.; Formulae for the direct calculation of. A. Rinck, 171.
- Juice:** Apple — in "pure fruit" preserves; Detection of. M. C. F. Muttelet, 398.
- K**
- Kastle-Meyer Reagent:** Copper; Highly sensitive reagent for: the —. P. Thomas and G. Carpentier, 90.
- Kent County Analyst:** Fertilisers and Feeding Stuffs Act, for the Quarter ended September 30, 1921; Report of the — under the. F. W. F. Arnaud, 69.
- Kent County Analyst:** Quarter ended September 30, 1921; Report of the — for the. F. W. F. Arnaud, 68.
- Ketones:** Nessler's reagent; New analytical applications of. Detection of —; Estimation of aldehydes. J. Bougault and R. Gros, 405.
- Ketones:** Aldehydes and — by means of hydroxylamine; The estimation of. A. H. Bennett and F. K. Donovan, 146.
- Kjeldahl's Method:** Hydrogen peroxide on the decomposition of plant and animal substances by —; Influence of. Kleeman, 34.
- Kjeldahl Process:** Organic matter in the —; New accelerator for the destruction of. M. Sborowsky, 530.
- Kola-Nuts:** Maté, coffee, tea, — and guarana; Estimation of caffeine in. T. Ugarte, 25.
- Krypton:** Spectrophotometry; Estimation of — and xenon by. C. Moureu and A. Lepape, 272.
- L**
- Laboratory Purposes:** Artificial daylight to — (Sheringham System); The application of. S. H. Groom, 419.
- Lactalbumin:** Monoamino acids formed by the hydrolysis of —; Estimation of the. D. B. Jones and C. O. Johns, 30.
- Lactation:** Avitaminosis on —; Influence of. E. Wollman and M. Vagliano, 404.
- Lactic Acid:** Small amounts of —; Estimation of. S. W. Clausen, 363.
- Laevulose:** Oat straw; Estimation of — in. S. H. Collins, 210.
- Lamp:** Daylight — in volumetric and colorimetric analysis; The use of the. W. Singleton, 424.
- Lamp:** Sodium — for polarimetry; New type of. H. A. Fales and J. C. Morell, 40.
- Lancaster:** County of —. Annual Report of the County Analyst for the year 1921. W. C. Williams, 296.
- Lavender Oil:** Reports on —. Etablissements Antoine Chiris, 303.
- Lead Acetate:** Solutions containing reducing sugars by means of basic —; Clarification of. Effect of different agents for removing lead. D. T. Englis and C. Y. Tsang, 301.
- Lead Amalgam:** Lead in —; Estimation of. M. G. Mellon, 533.
- Lead:** Cadmium and — in volumetric work; Reductions with. W. D. Treadwell, 533.
- Lead:** Copper, —, antimony and tin; Separation and estimation of: Analysis of white metal. A. Kling and A. Lassieur, 134.
- Lead:** Electro-Volumetric estimation of —. D. A. MacInnes and E. B. Townsend, 366.
- Lead Glass:** Pyrex to —; Graded seal for joining. W. C. Taylor and A. Bailey, 137.
- Lead:** — amalgam; Estimation of — in. M. G. Mellon, 533.
- Lead:** Natural waters on —; The action of. J. C. Thresh, 459, 500.
- Lead Nitrate:** Conductivity titrations by means of —. J. M. Kolthoff, 453.
- Lead Peroxide:** Iodimetric estimation of —; Direct. S. Glasstone, 90.
- Lead:** Self-raising flour; — in (Notes). N. T. Fox, 468.
- Lead:** Solutions containing reducing sugars by means of basic — acetate; Clarification of. Effect of different agents for removing —. D. T. Englis and C. Y. Tsang, 301.
- Lead:** Tea containing —. F. Wirthle and K. Amberger, 478.
- Leather:** Free sulphuric acid in —; Estimation of. C. Van Der Hoeven, 221.
- Leather Substitutes:** Examination; — and their. V. Froboese, 88.
- Leathers:** Water-soluble matter in vegetable-tanned —; Estimation of. Chater and Woodroffe, 488.
- Leaves:** Belladonna —; Chemical composition of. A. Goris and A. Larsonneau, 303.
- Lecithin:** Egg —; Unsaturated fatty acids of. P. A. Levene and I. P. Rolf, 356.
- (“**Lecithin**”): Lipoid phosphoric acid — in blood; Estimation of. F. S. Randles and A. Knudson, 446.
- Lecithin:** Liver —; Unsaturated fatty acids of. P. A. Levene and H. S. Simms, 356.

- Lees**: — wine and wine —; Composition of. L. Semichon, 302.
- Legal Notes**: 1922: 475, 513.
- Lemon**: Oil of —; Critical solution temperature of. G. Ajon, 172.
- Lemonade**: Phosphoric acid in —. L. R. Wolff, 354.
- Lignocellulose**: Reagent for —; Benzidine hydrochloride as a. C. van Zijp, 35.
- Lime**: Ferric oxide and alumina from — by the nitrate method; Separation of. Charriou, 271.
- Lipase**: Castor bean —. Its preparation and some of its properties. D. E. Haley and J. F. Lyman, 173.
- Lipase**: Various antiseptics on the activity of —; Influence of. L. S. Palmer, 404.
- Lipoid Phosphoric Acid**: Blood; Estimation of — (“lecithin”) in. F. S. Randles and A. Knudson, 446.
- Liquid Nitrogen Peroxide**: —; Analysis of. A. Sanfourche, 316.
- Liquid Paraffin**: Phenol in —; Solubility of. J. Cofman-Nicoresti, 260.
- Liquids**: Surface pressure of —; Measurement of the. A. Marcelin, 454.
- Liquorice Paste**: Adulterant of —; An (Notes). A. H. Bennett, 511.
- Liver Lecithin**: Unsaturated fatty acids of —. P. A. Levene and H. S. Simms, 356.
- Liver Oil**: Sulphuric acid reaction for —; Note on the (Notes). H. D. Richmond and E. H. England, 431.
- Liver Oil**: Tpe; Note on the — of the. A. C. Chapman, 203.
- Liver Oils**: Sulphuric acid reaction for —; The. J. C. Drummond and A. F. Watson, 341.
- Lumbang**: Oil. A. P. West and Z. Montes, 27.
- Lupins**: Bitter substances from —; Removal of. E. Beckmann and F. Lehmann, 361.
- M**
- Madras**: Government of —. Report of the Chemical Examiner for 1921. 433.
- Magnesium**: Commercial nickel; Estimation of — in. K. Chalupny and K. Breisch, 136.
- Magnesium**: — in small amounts; Colorimetric estimation of. F. S. Hammett and E. T. Adams, 368.
- Magnesium**: Manganese and phosphoric acid; Detection of — in presence of. A. Purgotti, 37.
- Magnesium Perchlorate**: Drying agent; — as a. H. H. Willard and G. F. Smith, 538.
- Magnesium**: Potassium in the presence of sodium, —, sulphates and phosphates; Investigation of Atkinson's process for the estimation of. S. J. Watson, 285.
- Magnesium Salt**: Clove, and its detection; Occurrence of a — in the. W. Plahl, 78.
- Magnesium**: Small amounts of —; Colorimetric method for the estimation of. A. P. Briggs, 409.
- Maize**: High and low protein content; Proteins in — of. M. F. Showalter and R. H. Carr, 487.
- Maize Meal**: Flora of —. C. Thom and E. Le Fevre, 83.
- Maize Oil**: —; Composition of. W. F. Baughman and G. S. Jamieson, 171.
- Malt Vinegar**: Spurious —; A (Notes). T. R. Hodgson, 254.
- Man**: Caffeine excretion in —; Quantitative estimation of the duration of. E. Friedberg, 174.
- Manganese**: Iron and —; Separation of. M. Carus, 92.
- Manganese**: Magnesium in presence of — and phosphoric acid; Detection of. A. Purgotti, 37.
- Manganese**: —, iron and cobalt; Reaction of. D. Baralew, 36.
- Manganese**: Raw caoutchouc; Presence of — in, and the origin of tackiness. G. Bruni and C. Pelizzola, 34.
- Marine Products**: Department of Scientific and Industrial Research. Food Investigation Board. The Methods Used for the Inspection of Canned Foods. Part II. Canned —. 350.
- Maté**: Caffeine in —, coffee, tea, kola-nuts and guarana; Estimation of. T. Ugarte, 25.
- Mayrhofer's Method**: Nitric acid in drinking water by —; Estimation of. A. Reuss, 311.
- Meal**: Foreign starch in —; Detection of. K. Amberger, 73.
- Meal**: Maize —; Flora of. C. Thom and E. Le Fevre, 83.
- Meal**: Starfish —; Chemical composition of. G. Hinard and R. Fillon, 33.
- Meat**: Carnosine content of —; Effect of cold storage upon the. W. M. Clifford, 443.
- Meat**: Department of Scientific and Industrial Research. Food Investigation Board. Canned — and fish; The Bacteriology of. 513.
- Meat**: Department of Scientific and Industrial Research. Food Investigation Board. The Preservation of Food by Freezing, with Special Reference to Fish and —. 392.
- Meat Extract**: Creatinine from —; Preparation of. H. Stendel, 174.
- Meat**: Incipient putrefaction in —; Detection of. J. Tillmans, R. Strohbecker and W. Schütze, 78.
- Meat Products**: Water; Composition of —, especially of those rich in. E. Feder, 300.
- Mechanical Analysis**: Soils on the basis of —; Classification of. C. L. Whittles, 360.
- Meconic Acid**: Opium; The estimation of — in. H. E. Annett and M. N. Bose, 387.
- Media**: Milk as affected by — and incubation temperature; Variations in bacteria counts from. G. C. Supplee, W. A. Whiting and P. A. Downs, 485.
- Membranes**: Flexible collodion —; Preparation of. J. M. Looney, 185.
- Mercurial Pills**: Mercury in —; Estimation of. M. François, 28.

- Mercuric Perchlorate**: Electrometric methods of analysis; Use of — in. I. M. Kolthoff, 411.
- Mercury**: Mercurial pills; Estimation of — in. M. François, 28.
- Mercury**: Silver and —; Separation of. I. M. Kolthoff, 134.
- Metallic Copper**: Water by means of — and its oxides; Activation of. R. Wernicke and A. Sordelli, 311.
- Metals**: Ferrocyanide titration of certain —; Influence of alkali — on the. W. D. Treadwell and D. Chervet, 535.
- Meteorological Office**: —, Air Ministry. Advisory Committee on Atmospheric Pollution. Report on Observations in the year ending March 31st, 1921. 256.
- Methoxyl Groups**: Estimation of —; Apparatus for the. W. M. Cumming, 131.
- Methyl Alcohol**: Morphine in the detection of — in potable spirit; Replacement of. B. Pfyl, G. Reif and A. Hanner, 77.
- Methyl Anthranilate**: Grape juice; Occurrence of — in. F. B. Power and V. K. Chesnut, 26.
- Methylarsinate**: Strychnine; Acid — of. J. Bouillot, 213.
- Metropolitan Borough of Stepney**: —. Borough Analyst for 1921; Annual Report of the. H. Hawley, 391.
- Metropolitan Borough of Stepney**: Public Analyst's Report for the First Quarter, 1922. H. Hawley. 256.
- Micro-Analytical Methods**: Foods; — in the examination of. F. Wohack, 126.
- Microchemical Colorimetric Method**: Tyrosine, tyramine and other phenols; — for estimating. M. T. Hanke and K. K. Koessler, 217.
- Microchemical Reactions**: Dulcin (*p*-phenetole-carbamide); — of. G. Denigès and R. Tourrou, 79.
- Micro-Estimation**: Nitrogen and its biological applications; — of. M. Polonovski and C. Vallée, 80.
- Micrography**: Crystals; Stereoscopic — of. M. François and C. Lormand, 94.
- Micro Method**: Proteins in blood; — for the estimation of. P. E. Howe, 129.
- Micropyrometer and Gas Furnace Methods**: Fusibility of coal ash; Comparison of the standard — for determining the. A. C. Fieldner, W. A. Selvig and W. L. Parker, 449.
- Microscopic Study**: Bacteria in cheese; — of. G. C. Hucker, 31.
- Microscopy Unit**: Quantitative — (Notes). J. F. Liverseege and U. Liverseege, 430.
- Milk**: Amino-acids in cow's —; Occurrence of. Y. Hijikata, 264.
- Milk**: Amylase of cows' — on various kinds of starch; Destructive action of the. F. Welz-muller, 305.
- Milk and Dairies (Amendment) Act**: —, 1922. L. V. Brock, 436.
- Milk**: Bacteria counts from — as affected by media and incubation temperature; Variations in. G. C. Supplee, W. A. Whiting and P. A. Downs, 485.
- Milk**: Cows' — in the Sudan; The composition of. A. F. Joseph and F. J. Martin, 426.
- Milk**: Cryoscopy of —. E. M. Bailey, 519.
- Milk**: Egyptian goats' —; Fat obtained from. A. Azadian, 352.
- Milk**: grading —; Alcohol test for. A. O. Dahlberg and H. S. Gardner, 25.
- Milk**: — and — products; Citric acid content of. G. C. Supplee and B. Bellis, 24.
- Milk**: Nitrates in — (Notes). G. D. Elsdon and P. Smith, 18.
- Milk**: Percentage composition of —; Effect of certain variations on the. W. Taylor and A. D. Husband, 356.
- Milk**: Peroxidase in —; Estimation of. F. E. Rice and T. Hanzawa, 305.
- Milk Products**: Milk and —; Citric acid content of. G. C. Supplee and B. Bellis, 24.
- Milk**: Soya bean albumin in cow's —; Detection of. K. Nakayasu, 398.
- Milk Supply**: Tropical —; A. A. Bruce, 288.
- Milk**: Vitamins *A* and *B* in the —; Influence of the diet of the cow upon the quantity of. C. Kennedy and R. A. Dutcher, 216.
- Mineral Carbonates**: Carbon dioxide in —; Estimation of. L. A. Sayce and A. Crawford, 225.
- Mineral Phosphates**: Citric solubility of — J. F. Tocher, 361.
- Mineral Waters**: Brines and —; Estimation of bromide in. C. C. Meloche and H. H. Willard, 368.
- Minerals**: Bacteria; Attack of — by. Oxidation of zinc blende. A. Helbronner and W. Rudolfs, 307.
- Mines**: Acid water from coal — and the estimation of acidity; Nature of. W. A. Selvig and W. C. Ratliff, 269.
- Ministry of Health**: Circular 325. 476.
- Ministry of Health**: —. Food Orders in Force. Circular 325 (England and Wales). A. K. MacLachlan, 396.
- Ministry of Health**: —. Sale of Food and Drugs Acts. Extracts from the Annual Report for 1920–21, and Abstract of Reports of Public Analysts for 1920. 69.
- Ministry of Health**: Sale of Food and Drugs Acts. Extracts from the Annual Report of the — for 1921–22, and Abstracts of Reports of Public Analysts for 1921. 469.
- Moisture**: Insulating oils; Estimation of — in. C. J. Rodman, 178.
- Molecular Properties**: Iodine; Relation between the — of certain hydrocarbons and their capacity for fixing. P. Woog, 132.
- Molecular Weights**: Osmotic pressure; Determination of — by means of. A. Foix, 454.
- Molybdenum**: Tungsten; Estimation of small amounts of — in. D. Hall, 409.
- Monazite**: —; Analysis of. P. Wenger and P. Christin, 452.
- Monazite Sand**: Thorium in — by an emanation method; Estimation of. H. H. Helmick, 136.
- Monoamino Acids**: Lactalbumin; Estimation of the — formed by the hydrolysis of. D. B. Jones and C. O. Johns, 30.

- Monobrom-Camphor**: —; Estimation of. E. O. Eaton, 173.
- Morphine**: Estimation of —; The. J. R. Nicholls, 506.
- Morphine**: Methyl alcohol in potable spirit; Replacement of — in the detection of. B. Pfl, G. Reif and A. Hanner, 77.
- Morphine**: Powdered opium; Loss of — in. C. E. Sage, 522.
- Morphine**: Storage of powdered opium; Loss of — on. H. E. Annett and H. D. Singh, 522.
- Mould**: Chlorine index and the nitrogen content of vegetable —; Relation between the. C. Veil, 176.
- Moulds**: Pentoses by —; Fermentation of. W. H. Peterson, E. B. Fred and E. G. Schmidt, 527.
- Mud**: Road drainage and —; Estimation of tar acids and tar bases in. J. J. Fox and A. J. H. Gauge, 406.
- Muscarine**: *Amanita Muscaria*; Isolation of — from. H. King, 526.
- Muscle Extract**: Carnosine in —; Estimation of. G. Hunter, 266.
- Museum Exhibits**: Cleaning and restoration of —; The. 120.
- Mustard Flour**: Volatile mustard oil in —; Estimation of. E. Luce and A. Doucet, 353.
- Mustard Oil**: Mustard flour; Estimation of volatile — in. E. Luce and A. Doucet, 353.
- Mutton**: Food poisoning from —; Bacterial. W. A. Young and G. D. Dawson, 528.

N

- Naal Grass**: — (Sudan); Essential oil of. A. F. Joseph and B. W. Whitfield, 314.
- Naphtha**: Calorific value of fuel —; Indirect determination of the. G. Morpurgo, 179.
- Natural Waters**: Lead; Action of — on. J. C. Thresh, 459, 500.
- Natural Waters**: Hydrogen ion concentration of some —. J. T. Saunders, 130.
- Neat's Foot Oil**: Bone fat and —. H. Eckart, 521.
- Neo-Arsphenamine**: Identification tests for —. L. Kofler and A. Perutz, 525.
- Neo-Arsphenamine**: Sulphate in —; Estimation of. E. Elvove, 481.
- Neo-Arsphenamine**: Toxicity of —. M. C. Hart and W. B. Payne, 305.
- Nephelectrometer**: —; The. I. N. Kugel-mass, 455.
- Nessler's Reagent**: New analytical applications of —. — Detection of ketones; estimation of aldehydes. J. Bougault and R. Gros, 405.
- Nickel**: Magnesium in commercial —; Estimation of. K. Chalupny and K. Breisch, 136.
- Nickel**: Silicate rocks; Detection of — and cobalt in. O. Hackl, 319.
- Nitrate Method**: Ferric oxide and alumina from lime by the —; Separation of. Charriou, 271.
- Nitrates**: Arsenic by the distillation method. Errors caused by — and nitrites in the estimation of, and a means for their prevention. J. J. T. Graham and C. M. Smith, 318.
- Nitrates**: Milk; — in (Notes). G. D. Elsdon and P. Smith, 18.
- Nitric Acid**: Drinking water by Mayrhofer's method; Estimation of — in. A. Reuss, 311.
- Nitric and Nitrous Nitrogen**: Fertiliser Research Committee; Report of the. (Method for the estimation of —.) H. Neubauer, 85.
- Nitrites**: Nitrates and — in the estimation of arsenic by the distillation method; Errors caused by, and a means for their prevention. J. J. T. Graham and C. M. Smith, 318.
- Nitro-Body Mixtures**: Nitroglycerin; The quantitative separation of — from. W. Dickson and W. C. Easterbrook, 112.
- Nitro Compounds**: Certain —; Colour reactions of. O. Rudolph, 87.
- Nitro Group**: Aromatic organic compounds; Estimation of the — in. T. Callan and J. A. R. Henderson, 363.
- Nitrogen**: Ammoniacal — in nitrogenous organic substances, especially in protein materials and their decomposition products; Estimation of. J. Froidevaux, 308.
- Nitrogen**: Biological applications; Micro-Estimation of — and its. M. Polonovski and C. Vallée, 80.
- Nitrogen**: Blood; Colorimetric estimation of amino-acid — in. O. Folin, 309.
- Nitrogen**: Blood; Estimation of non-protein — in. E. Ponder, 446.
- Nitrogen Content**: Chlorine index and the — of vegetable mould; Relation between the. C. Veil, 176.
- Nitrogen**: Fertiliser Research Committee; Report of the. (Method for the estimation of nitric and nitrous —.) H. Neubauer, 85.
- Nitrogen**: Normal urine; Colorimetric estimation of amino acid — in. O. Folin, 309.
- Nitrogen Oxides**: Gaseous — and alkaline solutions; Reactions between. A. Sanfourche, 536.
- Nitrogen**: Oxides of —; Estimation of. V. C. Allison, W. L. Parker and G. W. Jones, 182.
- Nitrogen Peroxide**: Liquid —; Analysis of. A. Sanfourche, 316.
- Nitrogenous Organic Substances**: Ammoniacal nitrogen in —, especially in protein materials and their decomposition products; Estimation of. J. Froidevaux, 308.
- Nitroglycerin**: Nitro-body mixtures from —; The quantitative separation of. W. Dickson and W. C. Easterbrook, 112.
- Nitrous Anion**: —; Detection of the. P. Falciola, 492.
- Nitrous Nitrogen**: Fertiliser Research Committee; Report of the. (Method for the estimation of nitric and —.) H. Neubauer, 85.
- Non-Protein Nitrogen**: Blood; Estimation of — in. E. Ponder, 446.
- Notes**: 1922 : 18, 67, 117, 166, 205, 254, 294, 430, 468, 510.

- Notes from the Reports of Public Analysts:** 1922: 19, 68, 119, 167, 207, 255, 295, 349, 391, 431.
- Nucleic Acid:** Animal —; Preparation and analysis of. P. A. Levene, 482.
- Nutritive Value:** Edible oils and fats; — of. Oil-bearing seeds and crude vegetable oils and fats. J. C. Drummond and S. S. Zilva, 306.
- Nuts:** Columbia; Guere palm — from. 124.
- Nuts:** Oil — from South America; New. 520.
- O**
- Oat Straw:** Laevulose in —; Estimation of. S. H. Collins, 210.
- Oats:** Ergot of diss and ergot of —; Chemical composition of. G. Tanret, 213.
- Obituary Notices:**
- Ashby, Alfred, M.B., F.I.C.**
- Cassal, Charles Edward, 102.**
- Hill, Dr. Alfred, F.I.C.**
- Jones, Edwin William Taylor, F.I.C.**
- Passmore, Francis William, F.I.C.**
- Odorous Constituents:** Peaches; The — of. F. B. Power and V. K. Chesnut, 26.
- Oil-Bearing Seeds:** Edible oils and fats; Nutritive value of. — and crude vegetable oils and fats. J. C. Drummond and S. S. Zilva, 306.
- Oil:** Cade; — of. R. Huerre, 303.
- Oil:** Cape chestnuts; — of. 400.
- Oil Nuts:** South America; New — from. 520.
- Oil of Lemon:** Critical solution temperature of —. G. Ajon, 172.
- Oil of Lemon:** Terpenes; Adulteration of — with. G. Ajon, 521.
- Oil of Turpentine:** Aleppo —. G. Dupont, 177.
- Oil:** *Samuela Carnerosana*; — from the seeds of. O. F. Black and J. W. Kelly, 400.
- Oils and Fats:** Edible —; Nutritive value of. Oil-bearing seeds and crude vegetable —. J. C. Drummond and S. S. Zilva, 306.
- Oils:** Colour measurement for —; Method of. L. W. Parsons and R. E. Wilson, 323.
- Oilseeds:** Tropical —; Certain. E. R. Bolton and D. G. Hewer, 282.
- Oils:** Chrome-leather; Extraction of — and fats from. D. Woodroffe, 221.
- Oils:** Refractive index and chemical characteristics of — and fats; Relation between the. G. F. Pickering and G. E. Cowlshaw, 220.
- Ointments:** B.P. —; The examination of. N. Evers and G. D. Elsdon, 197.
- Olive Oil:** Sesame oil in —; The Villavecchia reaction for the detection of. J. Prax, 75.
- Opaque Crystals:** Photomicrography of —. M. François and C. Lormand, 94.
- Opium:** Meconic acid in —; The estimation of. H. E. Annett and M. N. Bose, 387.
- Opium:** Morphine in powdered —; Loss of. C. E. Sage, 522.
- Opium:** Morphine on storage of powdered —; Loss of. H. E. Annett and H. D. Singh, 522.
- Orange Juice:** Antiscorbatic Vitamin C from desiccated —; Solubility of the. E. B. Hart, H. Steenbock and S. Lepkovsky, 357.
- Orcinol Test:** Furfural; The — for. E. J. Mueller, 34.
- Organic Analysis, Abstracts:** 1922: 33, 85, 130, 177, 220, 312, 362, 405, 447, 488, 530.
- Organic Analysis:** Potassium bromate in volumetric —; Use of. T. Callan and J. A. R. Henderson, 362.
- Organic Compounds:** Nitro group in aromatic —; Estimation of the. T. Callan and J. A. R. Henderson, 363.
- Organic Compounds:** Oxygen in —; Detection of. J. Piccard, 220.
- Organic Compounds:** Oxygen in —; Estimation of. H. Ter Meulen, 530.
- Organic Compounds:** Platinum oxides; Catalytic reduction of — by. V. Voorhees and R. Adams, 362.
- Organic Matter:** Kjeldahl process; New accelerator for the destruction of — in the. M. Sborowsky, 530.
- Organic Substances:** Ammoniacal nitrogen in nitrogenous —, especially in protein materials and their decomposition products; Estimation of. J. Froidevaux, 308.
- Ortho- and Meta-Phosphoric Acids:** Pyrophosphoric acid in the presence of —; Qualitative tests for. D. Baralew, 39.
- Osazones:** Formation of —; Researches on the. H. Van Laer and R. Lombaers, 76.
- Osmium:** Traces of —; Detection of. M. Hirsch, 319.
- Osmotic Pressure:** Molecular weights by means of —; Determination of. A. Foix, 454.
- Ostryis Alba:** *Scoparius* N.F.; — as substitute for. O. A. Farwell, 354.
- Oxalic Acid:** Iodimetric standard; — as an. L. Rosenthaler, 365.
- Oxalic Acid:** Oxidimetric standard; Hydrated — as an. A. E. Hill and T. M. Smith, 269.
- Oxidation:** Coal; Determination of the degree of — of. G. Charpy and G. Decorps, 40.
- Oxidation:** Mixtures of sulphuric acid and chromates; — by means of. L. J. Simon, 405.
- Oxidation Reaction:** Plants; — in the living cells of. K. Shibata, 403.
- Oxidation:** Red pigment of *Beta vulgaris* by — of chromogens; Formation of the. A. Kozlowski, 29.
- Oxidation:** Sulphides by — with ferric sulphate; Estimation of. P. P. Budnikov and K. E. Krauze, 492.
- Oxides:** Metallic copper and its —; Activation of water by means of. R. Wernicke and A. Sordelli, 311.
- Oxides of Nitrogen:** —; Estimation of. V. C. Allison, W. L. Parker and G. W. Jones, 182.
- Oxides of Nitrogen:** Slow combustion and explosion methods in gas analyses; Formation of — in the. G. W. Jones and W. L. Parker, 133.
- Oxides:** Organic compounds by platinum —; Catalytic reduction of. V. Voorhees and R. Adams, 362.
- Oxidimetric Standard:** Oxalic acid as an —; Hydrated. A. E. Hill and T. M. Smith, 269.

- Oxygen:** Hydrogen; Estimation of traces of — in. A. T. Larsen and E. C. White, 223.
- Oxygen:** Minute amounts of gaseous —; Quantitative estimation of. H. M. Sheaff, 365.
- Oxygen:** Organic compounds; Detection of — in. J. Piccard, 220.
- Oxygen:** Organic compounds; Estimation of — in. H. Ter Meulen, 530.
- P**
- P_H Value:** "Candy" test; Determination of the — of commercial glucose as a substitute for the. O. A. Sjostrum, 520.
- Palladium Chloride:** Hydrogen and its separation from paraffins by means of —; Estimation of. J. A. Müller and A. Foix, 451.
- Palm Nuts:** Columbia; Guere — from. 124.
- Papain:** Philippine —; Digestive properties of. H. C. Brill and R. E. Brown, 444.
- Paraffin:** Phenol in liquid —; Solubility of. J. Cofman-Nicoresi, 260.
- Paraffins:** Hydrogen and its separation from — by means of palladium chloride; Estimation of. J. A. Müller and A. Foix, 451.
- Parchment Membrane:** Dialysis of sucrose through a —; Influence of dextrose on the. L. A. Congdon and H. R. Ingersoll, 170.
- Pasteur Centenary:** —; The. 209.
- Pasteur:** Commemoration Fund. R. B. Pilcher, 438.
- Peaches:** Odorous constituents of —; The. F. B. Power and V. K. Chesnut, 26.
- Pectin:** Calcium pectate; Estimation of — as. M. H. Carré and D. Haynes, 263.
- Pectinase:** *Rhizopus*; — produced by different species of. L. L. Harter and J. L. Weimer, 174.
- Pencil Pigments:** Graphites and other —. C. A. Mitchell, 379.
- Penetrating Power:** X-rays by a new radiochromometric method; Measurement of the mean — of a beam of. M. de Laroquette, 227.
- Penetrating Rays:** Radium by means of —; Estimation of very small quantities of. B. Szilard, 413.
- Pentabromoacetone Method:** Citric acid in urine by the —; Quantitative estimation of. W. B. McClure, 486.
- Pentose-Fermenting Bacteria:** Certain —; Characteristics of. E. B. Fred, W. H. Peterson, and J. A. Anderson, 82.
- Pentoses:** Moulds; Fermentation of — by. W. H. Peterson, E. B. Fred and E. G. Schmidt, 527.
- Peptides:** Amino-acids and —; Alkalimetric estimation of. R. Willstätter and E. Waldschmidt-Leitz, 308.
- Peptone:** Formation of indol by *B. Coli*; Influence of — on the. F. W. Tilley, 174.
- Perilla Oil:** K. H. Bauer, 401.
- Peroxidase:** Milk; Estimation of — in. F. E. Rice and T. Hanzawa, 305.
- Peroxide:** Blood with nascent hydrogen —; The reaction of. A. Patzauer, 32.
- Peroxide:** Decomposition of plant and animal substances by Kjeldahl's method; Influence of hydrogen — on the. Kleeman, 34.
- Peroxide:** Hydrogen —; Colorimetric estimation of. M. L. Isaacs, 490.
- Peroxide:** Preservatives; Commercial hydrogen — containing. P. Poetschke, 304.
- Petroleum Products:** Iodine and bromine values of —. E. M. Johansen, 315.
- Petroleum Spirit:** Benzene in —; Detection of. P. Schwarz, 315.
- Petrological Investigation:** Brown-coal; The — of. R. Potonic, 531.
- Pharmacy Acts:** Amendment Bill. R. B. Pilcher, 23.
- Phenanthrene:** —; Quantitative estimation of. A. G. Williams, 87.
- o-Phenetidine:** Aluminium and iron by means of —; Separation of. K. Chalupny and K. Breisch, 491.
- (p-Phenetolecarbamide):** Dulcin —; Microchemical reactions of. G. Denigès and R. Tourrou, 79.
- Phenol:** Bacteria; Formation of — by. F. Sieke, 358.
- Phenol:** Liquid paraffin; Solubility of — in. J. Cofman-Nicoresi, 260.
- Phenols:** Blood; Quantitative estimation of — in. K. F. Pelkan, 217.
- Phenols:** Separation and estimation of —; Quantitative method for the. M. T. Hanke and K. K. Koessler, 221.
- Phenols:** Tyrosine, tyramine and other phenols; Microchemical colorimetric method for estimating. M. T. Hanke and K. K. Koessler, 217.
- Phenylcarbamide Derivatives:** *p*-hydroxy —; Sweetening power of. C. Speckan, 525.
- Philippine Papain:** Digestive properties of —. H. C. Brill and R. E. Brown, 444.
- Philippine:** Rice. A. H. Wells, F. Agcasili and R. T. Feliciano, 439.
- Phosphates:** Mineral —; Citric solubility of. J. F. Tocher, 361.
- Phosphates:** Sodium, magnesium, sulphates and —; Investigation of Atkinson's process for the estimation of potassium in. S. J. Watson, 285.
- Phosphoric Acid:** Argentometric titration of —. I. M. Koltzoff, 185.
- Phosphoric Acid:** Commercial —; Composition of. W. H. Ross, C. B. Durgin and R. M. Jones, 411.
- Phosphoric Acid:** Lemonade; — in. L. R. Wolff, 354.
- Phosphoric Acid:** Lipoid — ("lecithin") in blood; Estimation of. F. S. Randles and A. Knudson, 446.
- Phosphoric Acid:** Magnesium in presence of manganese and —; Detection of. A. Purgotti, 37.
- Phosphoric Acids:** Pyro-phosphoric acid in the presence of ortho- and meta- —; Qualitative tests for. D. Baralew, 39.

- Phosphorus**: —; Colorimetric estimation of. L. Losana, 226.
- Phosphorus**: Serum; Colorimetric estimation of inorganic — in small quantities of. F. F. Tisdall, 218.
- Photomicrography**: Opaque crystals; — of. M. François and C. Lormand, 94.
- Phthalate Solutions**: Hydrogen electrode standards; Use of — for. E. T. Oakes and H. N. Salisbury, 312.
- Physical Methods, Apparatus, etc. Abstracts**: 1922: 94, 226, 272, 321, 371, 411, 454, 538.
- Physico-Chemical Standards**: —; Bureau of. 208.
- Picrate Crystals**: Alkaloids under the microscope from the form of their —; Identification of. B. E. Nelson and H. A. Leonard, 212.
- Picrotoxin**: *Cocculus Indicus*; Effect of heat upon, and identification of —. D. S. Kabayao, 355.
- Pigment**: Red — of *Beta vulgaris* by oxidation of chromogens; Formation of the. A. Kozlowski, 29.
- Pigments**: Fat-soluble Vitamin A in relation to plant —; Occurrence of. H. Steenbock and H. T. Sell, 267.
- Pigments**: Pencil —; Graphites and other. C. A. Mitchell, 379.
- Pigments**: White —; Analysis of. M. Lombard, 91.
- Pigments**: Wine; Estimation of tannins and — in. W. Fresenius and L. Grünhut, 26.
- Pills**: Mercury in mercurial —; Estimation of. M. François, 28.
- Pitch Coke**: Volatile combustible matter in —; Estimation of. H. E. Lloyd and F. W. Yeager, 316.
- Plant and Animal Substances**: Decomposition of — by Kjeldahl's method; Influence of hydrogen peroxide on the. Kleeman, 34.
- Plant**: Incrustations. E. Schmidt and Duysen, 314.
- Plant Pigments**: Fat-soluble Vitamin A in relation to —; Occurrence of. H. Steenbock and M. T. Sell, 267.
- Plants**: Living cells of —; Oxidation reaction in the. K. Shibata, 403.
- Plasma**: Carbon monoxide in serum and —; Solubility of. H. R. O'Brien and W. L. Parker, 175.
- Plasma Proteins**: Estimation of —; New colorimetric method for the. H. Wu, 265.
- Platinum Oxides**: Organic compounds by —; Catalytic reduction of. V. Voorhees and R. Adams, 362.
- Poisoning**: Mutton; Bacterial food — from. W. A. Young and G. D. Dawson, 528.
- Poisons**: Red squill in rat —; Notes on the analysis and use of. C. L. Claremont, 60.
- Polarimetry**: Sodium lamp for —; New type of. H. A. Fales and J. C. Morell, 40.
- Polish Foxglove**: —; Investigations of. J. Muszynski, 28.
- Potable Spirit**: Methyl alcohol in —; Replacement of morphine in the detection of. B. Pfl, G. Reif and A. Hanner, 77.
- Potable Spirits**: Acetone in — by means of hydroxylamine hydrochloride; Estimation of. G. Reif, 77.
- Potassium Bromate**: Volumetric organic analysis; Use of — in. T. Callan and J. A. R. Henderson, 362.
- Potassium Dichromate**: Uranium with potassium permanganate and —; Electrometric titration of. D. T. Ewing and E. F. Eldridge, 409.
- Potassium Ferrocyanide**: Silver halides; Action of — on. G. B. Bonino, 39.
- Potassium Hydrogen Oxalate**: Alkali solutions; — and the standardisation of. Y. Osaka and K. Ando, 408.
- Potassium Iodide**: Iodates in —; Detection of. M. Lachartre, 480.
- Potassium Perchlorate**: Analysis of —; Rapid. V. Lenher and M. Tosterud, 271.
- Potassium Permanganate**: Uranium with — and potassium dichromate; Electrometric titration of. D. T. Ewing and E. F. Eldridge, 409.
- Potassium**: Sodium, magnesium, sulphates and phosphates; Investigation of Atkinson's process for the estimation of — in the presence of. S. J. Watson, 285.
- Potato**: Fusaria rots of the —. R. W. Coss, 32.
- Potato Juice**: Coloration of —. H. Haehn, 527.
- Potato Plants**: Copper from the soil by —; Absorption of. F. C. Cook, 84.
- Potentiometric Titration**: Ferrocyanide; — of. E. Müller and H. Lauterbach, 453.
- Powder**: Pyrethrum —. D. Costa, 260, 403.
- Powdered Opium**: Morphine in —; Loss of. C. E. Sage, 522.
- Powdered Opium**: Storage of —; Loss of morphine on. H. E. Annett and H. D. Singh, 522.
- Powders**: Explosives and other —; Method of testing the degree of incorporation of. E. P. Perman, 369.
- Preparations**: Emmenagogues and similar —; Composition of. C. Griebel, 441.
- Preservative**: Blood; Allyl alcohol as a — for. E. Salkowski, 175.
- Preservatives**: Cider —. R. D. Scott and E. G. Will, 123.
- Preservatives**: Hydrogen peroxide containing —; Commercial. P. Poetschke, 304.
- Preservatives**: Wood preservative; Zinc chloride as. Report of Committee No. 4 —. 315.
- Preserved Apple-Juice**: Free sulphurous acid in —; Progressive disappearance of. Warcollier and Le Moal, 212.
- Preserves**: Apple juice in "pure fruit" —; Detection of. M. C. F. Muttelet, 398.
- President**: Retiring —; Annual address of the. 105.
- Protein Content**: Maize of high and low —; Proteins in. M. F. Showalter and R. H. Carr, 487.

- Protein Materials:** Nitrogenous organic substances, especially in — and their decomposition products; Estimation of ammoniacal nitrogen in. J. Froidevaux, 308.
- Proteins:** Amino-acids from the products of hydrolysis of —, etc.; Separation of. H. W. Buston and S. B. Schryver, 264.
- Proteins:** Blood; Micro method for the estimation of — in. P. E. Howe, 129.
- Proteins:** Blood; Use of sodium sulphate as the globulin precipitant in the determination of — in. P. E. Howe, 128.
- Proteins:** Chinese edible birds nests; Composition of, and nature of their —. C. C. Wang, 122.
- Proteins:** Maize of high and low protein content; — in. M. F. Showalter and R. H. Carr, 487.
- Proteins:** Plasma —; New colorimetric method for the estimation of. H. Wu, 265.
- Proteins:** Tyrosine, tryptophane and cystine in —; Colorimetric estimation of. O. Folin and J. M. Looney, 359.
- Public Analyst:** Birmingham — for the Fourth Quarter, 1921; Report of the. J. F. Liverseege, 167.
- Public Analyst's Report:** City of Birmingham. — for the Third Quarter, 1922. J. F. Liverseege, 512.
- Public Analyst's Report:** Metropolitan Borough of Stepney. First Quarter, 1922; — for the. H. Hawley, 256.
- Public Analysts:** Association of — of Scotland; Memorandum from. On Administration of Food and Drugs Acts. 297.
- (Public Analysts in Scotland):** Dangerous Drugs. Dangerous Drugs — Order, 1922. 352.
- Public Analysts:** Sale of Food and Drugs Acts. Extracts from the Annual Report of the Ministry of Health for 1921-1922, and Abstracts of Reports of — for 1921. 469.
- Public Analysts:** Scottish Board of Health. Report on the Administration of the Sale of Food and Drugs Acts and Abstract of Reports of — for the year ending September 30, 1921. 432.
- Publications Received:** 1922: 95, 144, 192, 232, 280, 330, 378, 418, 458, 498, 544.
- Pulp:** "Bromine figure," or "chlorine factor" of —; Estimation of the. A. Tingle, 222.
- Pure and Applied Chemistry:** International Union of —. Second Conference. 20.
- Pure and Applied Chemistry:** International Union of —. Third International Conference. 207.
- "Pure Fruit" Preserves:** Apple juice in —; Detection of. M. C. F. Muttelet, 398.
- Putrefaction:** Carbolic acid during —; Formation of (Notes). J. S. Maclaurin, 294.
- Putrefaction:** Incipient — in meat; Detection of. J. Tillmans, R. Strohbecker and W. Schütze, 78.
- Pyrethrum:** Powder. D. Costa, 260, 403.
- Pyrex:** Lead glass; Graded seal for joining — to. W. C. Taylor and A. Bailey, 137.
- Pyridine:** —; Detection of. F. Lehner, 533.
- Pyrites:** Sulphur in burnt —; Volumetric estimation of. F. Chio, 38.
- Pyrophosphate:** Zinc as —; Estimation of. D. Balarew, 91.
- Pyro-Phosphoric Acid:** Ortho- and meta-phosphoric acids; Qualitative tests for — in the presence of. D. Balarew, 39.

Q

- Quantitative Analysis:** Measurement of super-saturation-time; — by. E. F. Hoppler, 538.
- Quantitative:** Microscopy unit; — (Notes). J. F. Liverseege and U. Liverseege, 430.
- Quinine Molybdate:** Arsenic by means of —; Colorimetric estimation of. D. Chouchak, 317.
- Quinones:** Reaction of —; New. R. Plummer, 532.

R

- Radiochrometric Method:** Mean penetrating power of a beam of X-rays by a new —; Measurement of the. M. de Laroquette, 227.
- Radium:** Penetrating rays; Direct estimation of very small quantities of — by means of. B. Szilard, 413.
- Raffinose:** —; Method for preparing. E. P. Clark, 211.
- Rat Poisons:** Red squill in —; Notes on the analysis and use of. C. L. Claremont, 60.
- Rays:** Radium by means of penetrating —; Estimation of very small quantities of. B. Szilard, 413.
- Reagent:** Copper; Highly sensitive — for: the Kastle-Meyer —. P. Thomas and G. Carpentier, 90.
- Reagent:** Lignocellulose; Benzidine hydrochloride as a — for. C. van Zijp, 35.
- Reagent:** Schiff's —; Modified. E. Wertheim, 488.
- Reagents:** Essential oils; Hydroferrocyanic and hydroferricyanic acids as. Van der Wielen, 402.
- Receiver:** Fractionation in a current of gas or under reduced pressure; A — for. T. S. Wheeler and E. W. Blair, 227.
- Red Pigment:** Oxidation of chromogens; Formation of the — of *Beta vulgaris* by. A. Kozlowski, 29.
- Red Squill:** Rat poisons; Notes on the analysis and use of — in. C. L. Claremont, 60.
- Reducing Sugars:** Basic lead acetate; Clarification of solutions containing — by means of. Effect of different agents for removing lead. D. T. Englis and C. Y. Tsang, 301.
- Reducing Sugars:** Fehling's solution; Quantitative estimation of — by. Elimination of certain errors. F. A. Quisumbing and A. W. Thomas, 27.
- Refractive Index:** American turpentine; The temperature coefficient of the — of (Notes). G. Thompson, 469.

- Refractive Index:** Oils and fats; Relation between the — and the chemical characteristics of. G. F. Pickering and G. E. Cowlishaw, 220.
- Report:** Birmingham City Analyst, 1921; Annual — of the. J. F. Liverseege, 255.
- Report:** Birmingham City Analyst for the Third Quarter, 1921; — of the. 19.
- Report:** Birmingham Public Analyst for the Fourth Quarter, 1921; — of the. J. F. Liverseege, 167.
- Report:** City of Birmingham. Public Analyst's — for the Third Quarter, 1922. J. F. Liverseege, 512.
- Report:** City of Birmingham. — of the City Analyst for the First Quarter, 1922. J. F. Liverseege, 295.
- Report:** City of Birmingham. — of the City Analyst for the Second Quarter, 1922. J. F. Liverseege, 431.
- Report:** County of Lancaster. Annual — of the County Analyst for the year 1921. W. C. Williams, 296.
- Report:** Department of Scientific and Industrial Research. First — of the Adhesives Research Committee. 434.
- Report:** Department of Scientific and Industrial Research. Food Investigation Board. — on Heat Insulators. 119.
- Report:** Dominion of Canada. Department of Agriculture. Interim — of the Dominion Chemist for the year ending March 31, 1921. 168.
- Report:** Fertiliser Research Committee; — of the. (Method for the estimation of nitric and nitrous nitrogen.) H. Neubauer, 85.
- Report:** Government Analytical Laboratory, Cairo. — of the Director for the year 1920. 21.
- Report:** Government of Madras. — of the Chemical Examiner for 1921. 433.
- Report:** Kent County Analyst for the Quarter ended September 30, 1921; — of the. F. W. F. Arnaud, 68.
- Report:** Kent County Analyst under the Fertilisers and Feeding Stuffs Act, for the Quarter ended September 30, 1921; — of the. F. W. F. Arnaud, 69.
- Report:** Meteorological Office, Air Ministry. Advisory Committee on Atmospheric Pollution. — on Observations in the year ending March 31st, 1921. 256.
- Report:** Metropolitan Borough of Stepney. Annual — of the Borough Analyst for 1921. H. Hawley, 391.
- Report:** Metropolitan Borough of Stepney. Public Analyst's — for the First Quarter, 1922. H. Hawley, 256.
- Report:** Ministry of Health. Sale of Food and Drugs Acts. Extracts from the Annual — for 1920-21, and Abstract of Reports of Public Analysts for 1920. 69.
- Report:** Sale of Food and Drugs Acts. Extracts from the Annual — of the Ministry of Health for 1921-1922, and Abstracts of Reports of Public Analysts for 1921. 469.
- Report:** Scottish Board of Health. Sale of Food and Drugs Acts; — on the administration of the, and Abstract of Reports of Public Analysts for the year ending September 30, 1921. 432.
- Report:** Somerset County Analyst, 1920; Annual — of the. D. R. Wood, 19.
- Report:** Somerset County Council. Annual — of the County Analyst and Bacteriologist for the year 1921. D. R. Wood, 349.
- Reports:** Scottish Board of Health. Report on the Administration of the Sale of Food and Drugs Acts and Abstract of — of Public Analysts for the year ending September 30, 1921. 432.
- Report:** Work of the Government Laboratory for the year ending March 31, 1922; — of the Government Chemist upon the. 471.
- Reports:** Sale of Food and Drugs Acts. Extracts from the Annual Report of the Ministry of Health for 1921-1922, and Abstracts of — of Public Analysts for 1921. 469.
- Reviews of Books:**
- Alcohol:** Power —: Its Production and Utilisation. G. W. Monier Williams, 327.
- Alkaloids:** Micro-Chemical Tests for —; Some. C. H. Stephenson, 137.
- Alloys:** Non-Ferrous —; The Analysis of F. Ibbotson and L. Aitchison, 374.
- Analysis:** Inorganic Substances; A Text Book of — of. S. A. Kay, 137.
- Analysis:** Organic —, Qualitative and Quantitative. E. de B. Barnett and P. C. L. Thorne, 230.
- Analytical:** Chemistry. Vol. I.: Qualitative. F. P. Treadwell, 186.
- Applied Chemistry:** Dictionary of —; A. Vol. III.: Explosives to K. E. Thorpe, 376.
- Applied Chemistry:** Progress of —; Reports of the. Vol. VI.: 1921. 457.
- Applied Chemistry:** Students in Technical Schools and Universities; Laboratory Exercises in — for. W. Moldenhauer, 276.
- Atmospheric Nitrogen:** —; Fixation of. J. Knox, 141.
- Biophysics:** Introduction to —; An. D. Burns, 41.
- Carbocyclic Compounds:** Organic Chemistry or the Chemistry of the Carbon Compounds. Vol. II., The Chemistry of the —. V. von Richter, 326.
- Carbon Compounds:** Chemistry of the —; Organic Chemistry, or the. Vol. II., The Chemistry of the Carbocyclic Compounds. V. von Richter, 326.
- Chemical Analyses:** Positive Electricity; Rays of, and their Application to —. J. J. Thomson, 96.
- Chemical Dictionary:** Popular —; The. C. T. Kingzett, 143.
- Chemical:** Disinfection and Sterilisation. S. Rideal and E. K. Rideal, 277.
- Chemical Industries:** Kelly's Directory of the —. 143.

Reviews of Books—continued:

- Chemical Microscopy:** Elementary —. E. M. Chamot, 230.
- Chemistry:** Analytical —. Vol. I.: Qualitative. F. P. Treadwell, 186.
- Chemistry:** Applied —; A Dictionary of. Vol. III.: Explosives to K. E. Thorpe, 376.
- Chemistry:** Concise History of —; A. T. P. Hilditch, 273.
- Chemistry:** Inorganic and Theoretical —; A Comprehensive Treatise on. Vols. I. and II. J. W. Mellor, 325.
- Chemistry:** Inorganic —; A Text-book of. A. F. Hollemann, 413.
- Chemistry:** Organic —, or the — of the Carbon Compounds. Vol. II., The — of the Carbocyclic Compounds. V. von Richter, 326.
- Chemistry:** Physics; Handbook of — and. C. D. Hodgman, assisted by M. F. Coolbaugh and C. E. Senseman, 229.
- Chemistry:** Practical Organic —; A Course of. T. S. Price and D. F. Twiss, 373.
- Chemistry:** Progress of Applied —; Reports of the. Vol. VI., 1921. 457.
- Chemistry:** Proteins; Colloid — of the. W. Pauli, 377.
- Chemistry:** Radio-Active Substances; An Introduction to the — of. A. S. Russell, 539.
- Chemistry:** Soaps and Proteins: Their Colloid — in Theory and Practice. M. H. Fischer and others, 329.
- Chimica Analitica Applicata:** —; Trattato di. Vol. II. G. V. Villavecchia, 494.
- La Chimie:** Mots et Locutions Intéressant la Physique et —; Dictionnaire Anglais-Français-Allemand de. R. Cornubert, 278.
- Clayworkers' Handbook:** —; The. A. B. Searle, 45.
- Coal-Tar Colours:** Decorative Industries; — in the. A. Clarke, 457.
- Colloid Chemistry:** Proteins; — of the. W. Pauli, 377.
- Colloid Chemistry:** Theory and Practice; Soaps and Proteins: Their — in. M. H. Fischer and Others, 329.
- Colloidal Behaviour:** Theory of —; Proteins and the. J. Loeb, 495.
- Colloids:** Physics and Chemistry of —; An Introduction to the. E. Hatschek, 188.
- Colours:** Decorative Industries; Coal-Tar — in the. A. Clarke, 457.
- Decorative Industries:** Coal-Tar Colours in the —. A. Clarke, 457.
- Dictionary:** Applied Chemistry; A — of. Vol. III., Explosives to K. E. Thorpe, 376.
- Dictionary:** Italian Technical Words and Phrases: An English-Italian and Italian-English —. E. F. Paventa, 47.
- Dictionary:** Popular Chemical —; The. C. T. Kingzett, 143.
- Dictionnaire aire Anglais-Français-Allemand:** La Physique et la Chimie; — de Mots et Locutions Intéressant. R. Cornubert, 278.

Reviews of Books—continued:

- Disinfection:** Sterilisation; Chemical — and. S. Rideal and E. K. Rideal, 277.
- Documents:** Scientific Examination; — and their. C. A. Mitchell, 497.
- Electricity:** Chemical Analyses; Rays of Positive — and their Application to. J. J. Thomson, 96.
- Electricity:** Hot Bodies; The Emission of — from. O. W. Richardson, 275.
- Farbenindikatoren:** —; Der Gebrauch von. I. M. Kolthoff, 375.
- Food Factors:** The Vitamine Manual: A Presentation of Essential Data about the New —. W. H. Eddy, 97.
- Food:** Vitamins and the Choice of —. V. G. Plimmer and R. H. A. Plimmer, 414.
- Foods:** Water, Sewage and —; The Chemical Examination of. J. E. Purvis and J. R. Hodgson, 455.
- Hot Bodies:** Electricity from —; The Emission of. O. W. Richardson, 275.
- Industries:** Chemical —; Kelly's Directory of the. 143.
- Inorganic and Theoretical Chemistry:** Comprehensive Treatise on —; A. Vols. I. and II. J. W. Mellor, 325.
- Inorganic Chemistry:** Text-Book of —; A. A. F. Hollemann, 413.
- Inorganic Substances:** Analysis of —; A Text-book of. S. A. Kay, 137.
- Italian Technical Words:** Phrases; — and: An English-Italian and Italian-English Dictionary. E. F. Paventa, 47.
- Kelly's Directory:** Chemical Industries; — of the. 143.
- Laboratory Exercises:** Students in Technical Schools and Universities; — in Applied Chemistry for. W. Moldenhauer, 276.
- Metabolism:** Protein —; The Physiology of. G. P. Cathcart, 96.
- Metallography:** —. C. H. Desch, 496.
- Metallurgical Analysis:** — (Non-Ferrous); Tested Methods of. S. Pile and R. Johnston, 540.
- Microbiology:** —. Edited by C. E. Marshall. 139.
- Micro-Chemical Tests:** Alkaloids; Some — for. C. H. Stephenson, 137.
- Microscopy:** Chemical —; Elementary. E. M. Chamot, 230.
- Microscopy:** —; Modern. M. I. Cross and M. J. Cole, 415.
- Nitrogen:** Atmospheric —; Fixation of. J. Knox, 141.
- Non-Ferrous Alloys:** Analysis of —; The. F. Ibbotson and L. Aitchison, 374.
- Organic Analysis:** —, Qualitative and Quantitative. E. de B. Barnett and P. C. L. Thorne, 230.
- Organic Chemistry:** Carbon Compounds; — or the Chemistry of the. Vol. II., The Chemistry of the Carbocyclic Compounds. V. von Richter, 326.
- Organic Chemistry:** Practical —; A Course of. T. S. Price and D. F. Twiss, 373.

Reviews of Books—continued:**Organic:** Syntheses. Vol. I. R. Adams, 187.**Petroleum:** —. B. Redwood, 190.**Pharmacy:** Year Book of —; The. 99.**Physico-Chemical Themes:** —; Some. A. W. Stewart, 539.**Physics:** Chemistry and —; Handbook of. C. D. Hodgman, assisted by M. F. Coolbaugh and C. E. Senseman, 229.**Physiology:** Protein Metabolism; The — of. G. P. Cathcart, 96.**La Physique:** Dictionnaire Anglais-Français-Allemand de Mots et Locutions Intéressant — et la Chimie. R. Cornubert, 278.**Plant Growth:** Soil Conditions and —. E. J. Russell, 43.**Poisons:** —: Their Effects and Detection. A. W. Blyth and M. W. Blyth, 189.**Positive Electricity:** Chemical Analyses; Rays of — and their Application to. J. J. Thomson, 96.**Power Alcohol:** —: Its Production and Utilisation. G. W. Monier Williams, 327.**Proof:** Problem of —; The. A. S. Osborn, 543.**Protein Metabolism:** Physiology of —; The. G. P. Cathcart, 96.**Proteins:** Colloid Chemistry of the —. W. Pauli, 377.**Proteins:** Colloidal Behaviour; — and the Theory of. J. Loeb, 495.**Proteins:** Soaps and —: Their Colloid Chemistry in Theory and Practice. M. H. Fischer and Others, 329.**Qualitative Analysis:** — (Supplement); Notes on. H. J. H. Fenton, 493.**Radio-Active Substances:** Chemistry of —; An Introduction to the. A. S. Russell, 539.**Rays:** Chemical Analyses; — of Positive Electricity and their Application to. J. J. Thomson, 96.**Reports:** Applied Chemistry; — of the Progress of. Vol. VI., 1921. 457.**Sewage:** Water, —, and Foods; The Chemical Examination of. J. E. Purvis and J. R. Hodgson, 455.**Soaps:** Proteins; — and: Their Colloid Chemistry in Theory and Practice. M. H. Fischer and Others, 329.**Soil Conditions:** Plant Growth; — and. E. J. Russell, 43.**Sterilisation:** Chemical Disinfection and —. S. Rideal and E. K. Rideal, 277.**Substances:** Analysis of Inorganic —; A. Text-book of. S. A. Kay, 137.**Syntheses:** Organic —. Vol. I. R. Adams, 187.**Synthetic:** Tannins. G. Grasser, 142.**Tannins:** Synthetic —. G. Grasser, 142.**Technical Schools:** Applied Chemistry for Students in — and Universities; Laboratory Exercises in. W. Moldenhauer, 276.**Theoretical Chemistry:** Inorganic and —; A Comprehensive Treatise on. Vols. I. and II. J. W. Mellor, 325.**Reviews of Books—continued:****Universities:** Students in Technical Schools and —; Laboratory Exercises in Applied Chemistry for. W. Moldenhauer, 276.**Vitamine Manual:** Food Factors; The —: A Presentation of Essential Data about the New. W. H. Eddy, 97.**Vitamins:** Food; — and the Choice of. V. G. Plimmer and R. H. A. Plimmer, 414.**Vitamins:** —; The. H. C. Sherman and S. L. Smith, 378.**Volatile Oils:** —; The. E. Gildemeister and Fr. Hoffmann, 542.**Water:** —, Sewage and Foods; The Chemical Examination of. J. E. Purvis and J. R. Hodgson, 455.**Year Book:** Pharmacy, 1921; The — of. 99.**Rhizopus:** Pectinase produced by different species of —. L. L. Harter and J. L. Weimer, 174.**Rice:** Philippine —. A. H. Wells, F. Agcasili and R. T. Feliciano, 439.**Rice:** Vitamin contents of — by the yeast method; Estimation of. W. D. Fleming, 81.**Ricin:** Agglutination test for —; Limits of the. H. Waites, 306.**Ricketts:** Experimental —; Studies on. E. V. McCollum, N. Simmonds, P. G. Shipley and E. A. Park, 31.**Road Drainage:** Tar acids and tar bases in — and mud; Estimation of. J. J. Fox and A. J. H. Gauge, 406.**Rock Dust:** Air; The sugar tube method of estimating — in. A. C. Fieldner, S. H. Katz and E. S. Longfellow, 272.**Rocks:** Arsenic in silicate —; Estimation of minute traces of. O. Hackl, 135.**Rocks:** Nickel and cobalt in silicate —; Detection of. O. Hackl, 319.**Roots:** Dragon tree; — of the. T. Steel, 210.**Rotating Electrodes:** Rapid electrolysis without —; Apparatus for. G. Edgar and R. B. Purdum, 371.**Rots:** Potato; Fusaria — of the. R. W. Coss, 32.**Rubber:** Free sulphur and the coefficient of vulcanisation in vulcanised —; Estimation of. W. J. Kelly, 313.**Rubber Hydrocarbon:** Tetrabromide method for estimating —; The. H. L. Fisher, H. Gray and R. Merling, 87.**Rubber:** Sulphur in vulcanised —; Estimation of. J. W. W. Dyer and A. R. Watson, 448.**Rules and Orders:** Statutory —; 1921, No. 1883. Food Control. F. H. Collier, 71.

S

Saccharimeter: Standardisation of the —; Preparation of pure sucrose for. A. Kraisy, 301.**Saffron:** Colouring matter of —; Identification of the. M. Guerbet, 481.

- Sale of Food and Drugs Acts:** Annual Report of the Ministry of Health for 1921-1922; Extracts from the, and Abstracts of Reports of Public Analysts for 1921. 469.
- Sale of Food and Drugs Acts:** Ministry of Health. — Extracts from the Annual Report for 1920-1921, and Abstract of Reports of Public Analysts for 1920. 69.
- Salicylic Acid:** Coffee essences; — in. 477.
- Saliva:** Human —; Hydrogen ion concentration of. H. E. Starr, 529.
- Salmon:** Immature feeding —; Decomposition of. A. C. Hunter, 443.
- Salt:** Magnesium — in the clove, and its detection; Occurrence of a. W. Plahl, 78.
- Salts:** Copper and iron in mixtures of their —; Rapid iodimetric estimation of. I. W. Wark, 224.
- Samuela Carnerosana:** Seeds of —; Oil from the. O. F. Flack and J. W. Kelly, 400.
- Sand:** Thorium in monazite — by an emanation method; Estimation of. H. H. Helmick, 136.
- Saponins:** Identification and estimation of —. L. Kofler, 403.
- Sausage:** Starch in —; Estimation of. J. Grossfeld, 74.
- Schiff's Reagent:** —; Modified. E. Wertheim, 488.
- Scientific and Industrial Research:** Department of —. Sampling and Analysis of Coal Committee. 256.
- Scoparius N. F.:** Substitute for —; *Osyris Alba* as. O. A. Farwell, 354.
- Scotland:** Association of Public Analysts of —; Memorandum from. On Administration of Food and Drugs Acts. 297.
- Scotland:** Dangerous Drugs (Public Analysts in —) Order, 1922. 352.
- Scottish Board of Health:** Sale of Food and Drugs Acts; Report on the administration of the, and Abstract of Reports of Public Analysts for the year ending September 30, 1921. 432.
- Seal:** Joining pyrex to lead glass; Graded — for. W. C. Taylor and A. Bailey, 137.
- Seams:** Structure of coal —; Method of representing the. F. S. Sinnatt, 450.
- Seeds:** Biochemical means; Determination of the value of — by. A. Neměc and F. Duchoň, 29.
- Seeds:** Certain field-weeds; The — and fruit of. J. Greger, 487.
- Seeds:** Edible oils and fats; Nutritive value of. Oil-bearing — and crude vegetable oils and fats. J. C. Drummond and S. S. Zilva, 306.
- Seeds:** *Samuela Carnerosana*; Oil from the — of. O. F. Black and J. W. Kelly, 400.
- Seeds:** Vitality of —; Biochemical evaluation of the. A. Neměc and F. Duchoň, 215.
- Self-Heating:** Hay; — of. G. Laupper, 29.
- Self-Raising Flour:** Carbon dioxide in —; Estimation of. B. R. Jacobs, 352.
- Self-Raising Flour:** Lead in — (Notes). N. T. Fox, 468.
- Sensitive Reagent:** Copper; Highly — for: the Kastle-Meyer reagent. P. Thomas and G. Carpentier, 90.
- Sensitiveness:** Barium; — of tests for. O. Lutz, 93.
- Sensitiveness:** Hydrocyanic acid; — of tests for. T. Sundberg, 215.
- Sensitiveness:** Strontium; — of tests for. O. Lutz, 93.
- Serum:** Carbon monoxide in — and plasma; Solubility of. H. R. O'Brien and W. L. Parker, 175.
- Serum:** Inorganic phosphorus in small quantities of —; Colorimetric estimation of. F. F. Tisdall, 218.
- Sesame Oil:** Olive oil; The Villavecchia reaction for the detection of — in. J. Prax, 75.
- (Sheringham System):** Artificial daylight to laboratory purposes —; The application of. S. H. Groom, 419.
- Shrimps:** Struvite in canned —; Note on an occurrence of. C. S. Purcell and C. H. Hickey, 16.
- Silage:** Acids in —; Estimation of. W. Zielstorff and F. Benirschke, 529.
- Silica:** —; Estimation of. R. C. Wells, 537.
- Silicate Rocks:** Arsenic in —; Estimation of minute traces of. O. Hackl, 135.
- Silicate Rocks:** Nickel and cobalt in —; Detection and estimation of. O. Hackl, 319.
- Silicotungstic Acid:** Caffeine by means of —; Estimation of. A. Azadian, 172.
- Silk:** Weighting of —; Rapid estimation of the. C. Tondani, 178.
- Silver Halides:** Potassium ferrocyanide on —; Action of. G. B. Bonino, 39.
- Silver:** Mercury; Separation of — and. I. M. Kolthoff, 134.
- Slow Combustion and Explosion Methods:** Oxides of nitrogen in the — in gas analyses; Formation of. G. W. Jones and W. L. Parker, 133.
- Society of Public Analysts and other Analytical Chemists, Proceedings of the:** 1922: 1, 49, 101, 145, 193, 233, 281, 331, 379, 419, 459, 499.
- Sodium:** Aluminium and alumina; Electrolytic estimation of. R. Geith, 452.
- Sodium:** Atkinson's process for the estimation of potassium in the presence of —, magnesium, sulphates and phosphates; Investigation of. S. J. Watson, 285.
- Sodium:** Fatty acids by the formation of complexes with uranyl and —; Characterisation of. J. Barlot and (Mdle.) M. T. Brenet, 132.
- Sodium:** Hydrosulphite. F. W. Heyl and F. E. Greer, 181.
- Sodium Hydroxide:** Absorbent for carbon dioxide in steel analysis; Solid — as an. G. L. Kelley and E. W. Evers, 91.
- Sodium Hydroxide Solution:** Carbon dioxide; Preparation of — free from. J. Cornog, 181.
- Sodium Lamp:** Polarimetry; New type of — for. H. A. Fales and J. C. Morell, 40.

- Sodium Sulphate:** Proteins in blood; Use of — as the globulin precipitant in the determination of. P. E. Howe, 128.
- Sodium Sulphide:** Commercial —; Analysis of. W. R. Atkin, 453.
- Soil:** Clay content and certain physical properties of a —; Relation between the. B. A. Keen and H. Raczkowski, 84.
- Soil:** Potato plants; Absorption of copper from the — by. F. C. Cook, 84.
- Soil:** Solutions. J. E. Greaves and C. T. Hirst, 312.
- Soils:** Mechanical analysis; Classification of — on the basis of. C. L. Whittles, 360.
- Solids:** Specific heats of —; Simple formula for the calculation of the. H. J. Krase, 322.
- Solution Temperature:** Oil of lemon; Critical — of. G. Ajon, 172.
- Somerset County Analyst:** Annual Report of the —, 1920. D. R. Wood, 19.
- Somerset County Council:** County Analyst and Bacteriologist for the year 1921; Annual Report of the. D. R. Wood, 349.
- South America:** Oil nuts from —; New. 520.
- Soya Bean Albumin:** Cow's milk; Detection of — in. K. Nakayasu, 398.
- Soya Bean Oil:** —; Composition of. W. B. Smith, 400.
- Specific Heats:** Alloys by means of their —; Analysis of. K. Zahlbruckner, 412.
- Specific Heats:** Solids; Simple formula for the calculation of the — of. H. J. Krase, 322.
- Spectrophotometry:** Krypton and xenon by —; Estimation of. C. Moureu and A. Lepape, 272.
- Spectroscopic Detection:** Carbon monoxide in blood by means of brewers' yeast; — of. C. Strzyzanski, 358.
- Spectrum:** *Gynocardia* oil; Colour reaction of, and its —. I. Lifschutz, 125.
- Spined Dog-Fish:** Oil. T. Lexow, 439.
- Spirit:** Methyl alcohol in potable —; Replacement of morphine in the detection of. B. Pfl, G. Reif and A. Hanner, 77.
- Spirits:** Acetone in potable — by means of hydroxylamine hydrochloride; Estimation of. G. Reif, 77.
- Spirits of Wine:** Denaturation of —; German Regulations for the. 300.
- Squill:** Red — in rat poisons; Notes on the analysis and use of. C. L. Claremont, 60.
- Standard Gas Furnace and Micropyrometer Methods:** Fusibility of coal ash; Comparison of the — for determining the. A. C. Fieldner, W. A. Selvig and W. L. Parker, 449.
- Standard:** Iodimetric —; Oxalic acid as an. L. Rosenthaler, 365.
- Standard:** Oxidimetric —; Hydrated oxalic acid as an. A. E. Hill and T. M. Smith, 269.
- Standard Steel "U":** Chemical —; British. (Analytically Standardised Sample.) 192.
- Standardisation:** China clay; — of. J. Strachan, 370.
- Standardisation:** Potassium hydrogen oxalate and the — of alkali solutions. Y. Osaka and K. Ando, 408.
- Standardisation:** Pure sucrose for — of the saccharimeter; Preparation of. A. Kraisy, 301.
- Standards:** Colorimetric methods; Use of dyes as — in. M. Takata, 32.
- Standards:** Phthalate solutions for hydrogen electrode —; Use of. E. T. Oakes and H. M. Salisbury, 312.
- Standards:** Physico-Chemical —; Bureau of. 208.
- Starch:** Amylase of cows' milk on various kinds of —; Destructive action of the. F. Welzmuller, 305.
- Starch:** Dakamballi — (Notes). J. A. Goodson, 205.
- Starch Indicator Solution:** —; A. (Notes). W. J. Painter, 166.
- Starches:** Raw —; Digestibility of. C. F. Langworthy and H. J. Deuel, junr. 356.
- Steel:** Carbon in cast iron and — by Corleis' method; Estimation of. G. Batta and H. Thyssen, 271.
- Stepney:** Metropolitan Borough of —. Public Analyst's Report for the First Quarter, 1922. H. Hawley, 256.
- Straw:** Laevulose in oat —; Estimation of. S. H. Collins, 210.
- Starch:** Meal; Detection of foreign — in. K. Amberger, 73.
- Starch:** Sausage; Estimation of — in. J. Grossefeld, 74.
- Starch Syrup:** Fruit juices, jams, etc.; Formulae for the direct calculation of — and sucrose in. A. Rinck, 171.
- Starch:** Wheat —; Characteristic of. T. E. Wallis, 516.
- Starch:** Zamia —. J. F. Clevenger, 170.
- Starfish Meal:** —; Chemical composition of. G. Hinard and R. Fillon, 33.
- Statutory Rules and Orders:** —, 1921, No. 1883. Food Control. F. H. Collier, 71.
- Steel Analysis:** Absorbent for carbon dioxide in —; Solid sodium hydroxide as an. G. L. Kelley and E. W. Evers, 91.
- Steel "A2":** British Chemical Standard —. (Analytically standardised sample.) 73.
- Steel "U":** Chemical Standard —; British. (Analytically standardised sample.) 192.
- Steel:** Vanadium in —; Colorimetric estimation of. G. Misson, 321.
- Steels:** Contact E.M.F.; Identification of — by means of the. Galibourg, 183.
- Stepney:** Metropolitan Borough of —. Annual Report of the Borough Analyst for 1921. H. Hawley, 391.
- Stepney:** Metropolitan Borough of —. Public Analyst's Report for the First Quarter, 1922. H. Hawley, 256.
- Stereoscopic Micrography:** Crystals; — of. M. François and C. Lormand, 94.
- Stimulants:** Yeast; Effect of — upon the invertase activity of. E. W. Miller, 82.
- Strontium:** Tests for —; Sensitiveness of. O. Lutz, 93.
- Struvite:** Canned shrimps; Note on an occurrence of — in. C. S. Purcell and C. H. Hickey, 16.

- Strychnine:** Acid methylarsinate of —. J. Bouillot, 213.
- Substances:** Properties of — on drying; Change of. H. B. Baker, 321.
- Sucrose:** Alkaline copper solutions; Inversion of — by. M. L. Maquenne, 479.
- Sucrose:** Alkaline earth hydroxides; Estimation of — in the presence of other carbohydrates by means of. A. Behre and A. Düring, 478.
- Sucrose:** Dextrose; Test for — in the presence of. L. A. Congdon and C. R. Stewart, 123.
- Sucrose:** Dialysis of — through a parchment membrane; Influence of — on the. L. A. Congdon and H. R. Ingersoll, 170.
- Sucrose:** Saccharimeter; Preparation of pure — for standardisation of the. A. Kraisy, 301.
- Sucrose:** Starch syrup and — in fruit juices jams, etc.; Formulae for the direct calculation of. A. Rinck, 171.
- Sudan:** Cows' milk in the —; The composition of. A. F. Joseph and F. J. Martin, 426.
- (**Sudan**): Naal grass —; Essential oil of. A. F. Joseph and B. W. Whitfield, 314.
- Sugar:** Chinese edible birds'-nests; Isolation and nature of the amino — of. C. C. Wang, 123.
- Sugar Content:** Hen's egg; — of the. J. S. Hepburn and E. Q. St. John, 171.
- Sugar:** Cuprous oxide obtained from Fehling solution; Estimation of — by titration with alkali hydroxide of the. A. Hanak, 75.
- Sugar:** Normal human urine; Colorimetric method for the estimation of — in. O. Folin and H. Berglund, 268.
- Sugar:** Resorcinol or β -naphthol; A simple test for technical invert — in honey with. F. M. Litterscheid, 76.
- Sugar:** Thymine in the presence of —; Detection of. H. J. Deuel and O. Baudisch, 399.
- Sugar Tube Method:** Rock dust in air; The — of estimating. A. C. Fieldner, S. H. Katz and E. S. Longfellow, 272.
- Sugars:** Glycerol in the presence of —; Estimation of. L. F. Hoyt and H. V. Pemberton, 172.
- Sugars:** Reducing — by Fehling's solution; Quantitative estimation of. Elimination of certain errors. F. A. Quisumbing and A. W. Thomas, 27.
- Sugars:** Solutions containing reducing — by means of basic lead acetate; Clarification of. Effect of different agents for removing lead. D. T. Englis and C. Y. Tsang, 301.
- Sulphate:** Hyoscyamine and its —; Preparation and racemisation of. A. Goris and P. Costy, 522.
- Sulphate:** Neo-arsphenamine; Estimation of — in. E. Elvove, 481.
- Sulphate:** Sulphide by oxidation to —; Volumetric estimation of. H. H. Willard and T. E. Cake, 38.
- Sulphates:** Potassium in the presence of sodium, magnesium, — and phosphates; Investigation of Atkinson's process for the estimation of. S. J. Watson, 285.
- Sulphide of Antimony:** Available sulphur in golden —; Estimation of. B. D. W. Luff and B. D. Porritt, 90.
- Sulphide:** Sulphate; Volumetric estimation of — by oxidation to. H. H. Willard and T. E. Cake, 38.
- Sulphides:** Oxidation with ferric sulphate; Estimation of — by. P. P. Budnikov and K. E. Krauze, 492.
- Sulphites:** Foods for the presence of —; Note on the examination of. A. C. Chapman, 20.
- Sulphoacetates:** Free sulphuric acid and — in cellulose acetates; Detection and estimation of. M. Entat and E. Vulquin, 312.
- Sulphonated Derivatives:** Naturally occurring sulphurised hydrocarbons; — of. C. Pepin and G. Reaumont, 525.
- Sulphoxylic and Hydrosulphurous Acids:** —; Estimation of. F. De Bacho, 184.
- Sulphoxylic and Hydrosulphurous Acids:** —; Iodimetric estimation of. F. de Bacho, 369.
- Sulphur:** Burnt pyrites; Volumetric estimation of — in. F. Chiò, 38.
- Sulphur:** Coal gas; Estimation of total — in. A. Klemmer, 134.
- Sulphur:** Golden sulphide of antimony; Estimation of available — in. B. D. W. Luff and B. D. Porritt, 90.
- Sulphur:** —; Rapid estimation of. L. Losana, 365, 492.
- Sulphur:** Vulcanised rubber; Estimation of free — and the coefficient of vulcanisation in. W. J. Kelly, 313.
- Sulphur:** Vulcanised rubber; Estimation of — in. J. W. W. Dyer and A. R. Watson, 448.
- Sulphuric Acid:** Free — and sulphoacetates in cellulose acetates; Detection and estimation of. M. Entat and E. Vulquin, 312.
- Sulphuric Acid:** Leather; Estimation of free — in. C. Van der Hoeven, 221.
- Sulphuric Acid:** Mixtures of — and chromates; Oxidation by means of. L. J. Simon, 405.
- Sulphuric Acid Reaction:** Liver oil; Note on the — for (Notes). H. D. Richmond and E. H. England, 431.
- Sulphuric Acid Reaction:** Liver oils; The — for. J. C. Drummond and A. F. Watson, 341.
- Sulphuric-Chromic Mixture:** Carbon and hydrogen by means of the —; Estimation of. L. J. Simon and A. J. A. Guillaumin, 530.
- Sulphurised Hydrocarbons:** Naturally occurring —; Sulphonated derivatives of. C. Pepin and G. Reaumont, 525.
- Sulphurous Acid:** Preserved apple-juice; Progressive disappearance of free — in. Warcollier and Le Moal, 212.
- Sulphurous Acid:** Wines containing —; Estimation of the volatile acidity of. R. Marcille, 480.
- Sulphurous Acid:** Wines; Estimation of — in. Martini and A. Nourrisson, 211.
- Supersaturation-Time:** Measurement of —; Quantitative analysis by. E. F. Hoppler, 538.
- Surface Pressure:** Liquids; Measurement of the — of. A. Marcelin, 454.

- Sweet Substances:** Sweetening value of —. T. Paul, 261.
- Sweetening Power:** *p*-Hydroxy phenylcarbamide derivatives; — of. C. Speckan, 525.
- Sweetening Value:** Sweet substances; — of. T. Paul, 261.
- Symmetrical Diphenyl-Guanidine:** Standard in acidimetry and alkalimetry; — as a. C. A. Carlton, 408.
- Syrup:** Starch — and sucrose in fruit juices, jams, etc.; Formulae for the direct calculation of. A. Rinck, 171.
- T**
- Taamya:** — (an Egyptian food); Composition of. A. Azadian, 478.
- Tackiness:** Manganese in raw caoutchouc and the origin of —; Presence of. G. Bruni and C. Pelizzola, 34.
- Tannin Analysis:** Method of —; Contribution to the. J. Schneider, junr., 448.
- Tanning Chemistry:** Analysis in —. G. Grasser, 132.
- Tannins:** Wine; Estimation of — and pigments in. W. Fresenius and L. Grünhut, 26.
- Tantalocolumbates:** Tantalum, columbium, and their mineral associates: I., Use of tartaric acid in the analysis of natural —; II., Separation of zirconium from tantalum and from columbium. W. R. Schoeller and A. R. Powell, 93.
- Tantalum:** —, columbium, and their mineral associates: I., Use of tartaric acid in the analysis of natural tantalocolumbates; II., Separation of zirconium from — and from columbium. W. R. Schoeller and A. R. Powell, 93.
- Tar Acids:** Road drainage and mud; Estimation of — and tar bases in. J. J. Fox and A. J. H. Gauge, 406.
- Tar Bases:** Tar acids and — in road drainage and mud; Estimation of. J. J. Fox and A. J. H. Gauge, 406.
- Tartaric Acid:** Tantalum, columbium, and their mineral associates: I., Use of — in the analysis of natural tantalocolumbates; II., Separation of zirconium from tantalum and from columbium. W. R. Schoeller and A. R. Powell, 93.
- Tea:** Lead; — containing. F. Wirthle and K. Amberger, 478.
- Tea:** Maté, coffee, —, Kola-nuts and Guarana; Estimation of caffeine in. T. Ugarte, 25.
- Technical Gas Analysis:** Apparatus for —. H. M. Lowe, 133.
- Technical Invert Sugar:** Resorcinol or β -naphthol; A simple test for — in honey with. F. M. Litterscheid, 76.
- Temperature Coefficient:** American turpentine; The — of the refractive Index of (Notes). G. Thompson, 469.
- Temperatures:** Hydrogenation at high — without pressure; Apparatus for. J. Klimont, 228.
- Terpenes:** Oil of lemon with —; Adulteration of. G. Ajon, 521.
- Test-paper:** Acetylene; — for the detection of. G. Denigès, 33.
- Tetrabromide Method:** Rubber hydrocarbon; The — for estimating. H. L. Fisher, H. Gray and R. Merling, 87.
- Theobromine Content:** Cacao-beans and cocoa; The — of. R. V. Wadsworth, 152.
- Thermostat:** Electric — constant to 0.02° C.; Improvised. S. C. Bradford, 272.
- Thorium:** Monazite sand by an emanation method; Estimation of — in. H. H. Helmick, 136.
- Thymine:** Identification of —; Methods for the. T. B. Johnson and O. Baudisch, 177.
- Thymine:** Sugar; Detection of — in the presence of. H. J. Deuel and O. Baudisch, 399.
- Tin Alloys:** Ferruginous —; Analysis of. A. Meyer, 224.
- Tin:** Antimony and — in copper alloys; Volumetric estimation of. F. J. Mück, 490.
- Tin:** Copper, lead, antimony and —; Separation and estimation of: Analysis of white metal. A. Kling and A. Lassieur, 134.
- Tin:** Iodide; Detection of — as. H. Heller, 367.
- Titanium:** Bauxium; Volumetric estimation of — in. H. J. Winch and V. L. Chaudratreya, 320.
- Titanium:** Ferrous products; Estimation of — in. L. Losana and E. Carozzi, 536.
- Titanium:** Trivalent —. II., Estimation of copper and iron in presence of each other. W. M. Thornton, 320.
- Titrations:** Ethyl alcohol as solvent; — in. E. R. Bishop, E. B. Kittredge and J. H. Hildebrand, 220.
- Tope:** Liver oil of the —; Note on the. A. C. Chapman, 203.
- Total Sulphur:** Coal gas; Estimation of — in. A. Klemmer, 134.
- Toxicity:** Certain caffees; Abnormal — of. 441.
- Toxicity:** Commercial caffees; — of. 441.
- Toxicity:** Neo-arsphenamine; — of. M. C. Hart and W. B. Payne, 305.
- Toxicological Investigations:** Atropine in —; Volatilisation and hydrolysis of. P. Hardy, 482.
- Toxicology:** Arsenic; — of. N. Tarugdi, 304.
- Trimethyleneglycol:** Crude glycerin; Estimation of — in. L. V. Cocks and A. H. Salway, 131.
- Trivalent Titanium:** —. II., Estimation of copper and iron in presence of each other. W. M. Thornton, 320.
- Tropical Milk Supply:** —; A. A. Bruce, 288.
- Tropical Oilseeds:** "Certain —." E. R. Bolton and D. G. Hewer, 282.
- Trypsin:** —; Quantitative estimation of. S. Kai, 358.
- Tryptophane:** Tyrosine, — and cystine in proteins; Colorimetric estimation of. O. Folin and J. M. Looney, 359.

- Tung Oil:** Vegetable oils; Estimation of the acid value of — and other. L. L. Steele and G. G. Sward, 177.
- Tungsten:** Aluminium in —; Estimation of. V. and K. Froboese, 225.
- Tungsten:** Molybdenum in —; Estimation of small amounts of. D. Hall, 409.
- Turkey:** Abdominal adipose tissue of the —; Enzymes of the. J. S. Hepburn, 81.
- Turpentine:** Oil of —; Aleppo. G. Dupont, 177.
- Turpentine:** Refractive index of American —; The temperature coefficient of the (Notes). G. Thompson, 469.
- Turpentine:** Wood —. C. A. Lambert, 406.
- Tyramine:** Tyrosine, — and other phenols; Microchemical colorimetric method for estimating. M. T. Hanke and K. K. Koessler, 217.
- Tyrosine:** Proteins; Colorimetric estimation of —, tryptophane and cystine in. O. Folin and J. M. Looney, 359.
- Tyrosine:** —, tyramine and other phenols; Microchemical colorimetric method for estimating. M. T. Hanke and K. K. Koessler, 217.

U

- Ultimate Analysis:** Coal; Short method for the — of. S. W. Parr, 449.
- Ultra Violet Light:** Analysis; The use of — in (Notes). A. F. Kitching, 206.
- United States Department of Agriculture:** —. Food Inspection Decision 184. Colours in Food. 438.
- Universal Indicator:** Use of a —; Demonstration of the. F. H. Carr, 196.
- Unsaturated Fatty Acids:** Egg lecithin; — of. P. A. Levene and I. P. Rolf, 356.
- Unsaturated Fatty Acids:** Liver lecithin; — of. P. A. Levene and H. S. Simms, 356.
- Unsaturated Hydrocarbons:** Cracked gasolines. Iodine values of — and. W. F. Faragher, W. A. Gruse and F. H. Garner, 86.
- Uranium:** Carnotite; Glacial acetic acid method for estimating — in. W. W. Scott, 410.
- Uranium:** Potassium permanganate and potassium dichromate; Electrometric titration of — with. D. T. Ewing and E. F. Eldridge, 409.

- Uranium:** —; Test for. H. D. Buell, 491.
- Uranium:** Volumetric solutions of —; Preservation of. 321.
- Uranyl:** Formation of complexes with — and sodium; Characterisation of fatty acids by the. J. Barlot and (Mdlle.) M. T. Brenet, 132.
- Urea:** Colour reaction for —. V. Arreguine, junr., and E. D. Garcia, 309.
- Urea:** Fungi; Urease and — in. A. Goris and P. Costy, 527.
- Urea:** Gasometric estimation of —. R. H. Stehle, 268.
- Urea:** Urine; Hypobromite estimation of — in. M. Janet, 486.

- Urease:** Fungi; — and urea in. A. Goris and P. Costy, 527.
- Uric Acid:** Blood; Colorimetric estimation of — in. Grigaut, 83.
- Uric Acid:** Folin's colorimetric method for the estimation of —; Modification of. H. Jackson and W. W. Palmer, 176.
- Uric Acid:** Minute amounts of —; Colorimetric estimation of. J. L. Morris and A. J. Macleod, 176.
- Uric Acid:** —; Estimation of. H. Jackson and W. W. Palmer, 487.
- Uric Acid:** Urine; Direct estimation of — in. S. R. Benedict and E. Franke, 404.
- Urine:** Amino acid nitrogen in normal —; Colorimetric estimation of. O. Folin, 309.
- Urine:** Bismuth in —; Detection of. P. Aubry, 129.
- Urine:** Calcium in —; Rapid estimation of. A. T. Shohl and F. G. Pedley, 219.
- Urine:** Citric acid in — by the pentabromoacetone method; Quantitative estimation of. W. B. McClure, 486.
- Urine:** Homogentisic acid in —; Colorimetric estimation of. A. P. Briggs, 310.
- Urine:** Sugar in normal human —; Colorimetric method for the estimation of. O. Folin and H. Berglund, 268.
- Urine:** Urea in —; Hypobromite estimation of. M. Janet, 486.
- Urine:** Uric acid in —; Direct estimation of. S. R. Benedict and E. Franke, 404.

V

- Vanadic Acid:** Ammonium phosphomolybdate; Co-Precipitation of — with. J. R. Cain and J. C. Hostetter, 184.
- Vanadium:** Iron and — after reduction by hydrogen sulphide; Estimation of. G. E. F. Lundell and H. B. Knowles, 37.
- Vanadium:** Steel; Colorimetric estimation of — in. G. Misson, 321.
- Vegetable Mould:** Chlorine index and the nitrogen content of —; Relation between the. C. Veil, 176.
- Vegetable Oils and Fats:** Edible oils and fats; Nutritive value of. Oil-bearing seeds and crude —. J. C. Drummond and S. S. Silva, 306.
- Vegetable Oils:** Tung oil and other —; Estimation of the acid value of. L. L. Steele and G. G. Sward, 177.
- Vegetable-Tanned Leathers:** Water-soluble matter in —; Estimation of. Chater and Woodroffe, 488.
- Veronal:** Hypnotic derivatives of barbituric acid and its applications; A reaction of — and R. Fabre, 523.
- Vessels:** Aluminium —; Cleaning. B. Seligman and P. Williams, 493.
- Villavecchia Reaction:** Sesame oil in olive oil; The — for the detection of. J. Prax, 75.
- Vinegar:** Spurious malt —; A (Notes). T. R. Hodgson, 254.

- Vitali's Reaction:** Cocaine; — for. P. Hardy, 27.
- Vitality:** Seeds; Biochemical evaluation of the — of. A. Némec and F. Duchoň, 215.
- Vitamin A:** Fat-soluble factor —; Quantitative estimation of the. S. S. Zilva and M. Miura, 267.
- Vitamin A:** Fat-soluble — in relation to plant pigments; Occurrence of. H. Steenbock and M. T. Seil, 267.
- Vitamin-Activated Fuller's Earth:** —; Preparation of. A. Seidell, 357.
- Vitamin:** Antiscorbutic (— C); Estimation of the. H. C. Sherman, V. K. LaMer and H. L. Campbell, 216.
- Vitamin B:** Water-soluble —; Bacteria as a source of. S. R. Damon, 81.
- Vitamin B:** Isolation of —; Experiments on the. A. Seidell, 484.
- Vitamin B:** Solvent for water-soluble —; Glacial acetic acid as. V. E. Levine, E. V. McCollum and N. Simmonds, 444.
- (Vitamin C):** Antiscorbutic vitamin —; Estimation of the. H. C. Sherman, V. K. LaMer and H. L. Campbell, 216.
- Vitamin C:** Dried orange juice; Solubility of the antiscorbutic — from. E. B. Hart, H. Steenbock and S. Lepkovsky, 357.
- Vitamin:** Calcium deposition; Existence of a — which promotes. E. V. McCollum, N. Simmonds, J. E. Becker and P. G. Shipley, 484.
- Vitamin Content:** Cod liver oil and its effect upon the —; Preparation of. J. C. Drummond and S. S. Da Zilva, 445.
- Vitamin Content:** Honey and honeycomb; — of. P. B. Hawk, C. A. Smith and O. Bergein, 30.
- Vitamin Content:** Indian foodstuffs; — of some. S. N. Ghose, 267.
- Vitamin Contents:** Rice by the yeast method; Estimation of — of. W. D. Fleming, 81.
- Vitamin:** Invertase; Effect of heat upon the antiscorbutic — in the presence of. E. Smith and G. Medes, 30.
- Vitamins A and B:** Milk; Influence of the diet of the cow upon the quantity of — in the. C. Kennedy and R. A. Dutcher, 216.
- Vitamins:** Foodstuffs for —; The testing of. J. C. Drummond and A. F. Watson, 235.
- Volatile Acidity:** Wines containing sulphurous acid; Estimation of the — of. R. Marcille, 480.
- Volatile Combustible Matter:** Pitch coke; Estimation of — in. H. E. Lloyd and F. W. Yeager, 316.
- Volatile Mustard Oil:** Mustard flour; Estimation of — in. E. Luce and A. Doucet, 353.
- Volatilisation:** Atropine in toxicological investigations; — and hydrolysis of. P. Hardy, 482.
- Volumetric and Colorimetric Analysis:** Daylight lamp in —; The use of the. W. Singleton, 424.
- Volumetric Organic Analysis:** Potassium bromate in —; Use of. T. Callan and J. A. R. Henderson, 362.
- Volumetric Solutions:** Uranium; Preservation of — of. 321.
- Volumetric Work:** Cadmium and lead in —; Reductions with. W. D. Treadwell, 533.
- Vulcanised Rubber:** Free sulphur and the coefficient of vulcanisation in —; Estimation of. W. J. Kelly, 313.
- Vulcanised Rubber:** Sulphur in —; Estimation of. J. W. W. Dyer and A. R. Watson, 448.

W

- Water:** Active carbon dioxide and hydrogen-ion concentration in the examination of —. J. M. Kolthoff, 311.
- Water Analysis, Abstracts:** 1922: 130, 311.
- Water:** Cherry laurel —; Distilled. H. Pecker, 402.
- Water:** Coal mines and the estimation of acidity; Nature of acid — from. W. A. Selvig and W. C. Ratliff, 269.
- Water Hardened fats;** Absorption of — by. K. Brauer, 480.
- Water:** Hydrogen ion concentration in — by means of indicators without buffer solutions; Determination of. L. Michaelis, 89.
- Water:** Meat products, especially of those rich in —; Composition of. E. Feder, 300.
- Water:** Metallic copper and its oxides; Activation of — by means of. R. Wernicke and A. Sordelli, 311.
- Water:** Nitric acid in drinking — by Mayrhofer's method; Estimation of. A. Reuss, 311.
- Water:** Soft —; Action of glass bottles on (Notes). J. F. Liverseege and E. M. Milward, 67.
- Water-Soluble Vitamin B:** Source of —; Bacteria as a. S. R. Damon, 81.
- Water-Soluble Vitamin B:** Solvent for —; Glacial acetic acid as. V. E. Levine, E. V. McCollum and N. Simmonds, 444.
- Water-Soluble Matter:** Vegetable-tanned leathers Estimation of — in. Chater and Woodroffe, 488.
- Waterbath:** Stirring —; Apparatus for. C. H. D. Clark and G. T. P. Tatham, 412.
- Waters:** Brines and mineral —; Estimation of bromide in. C. C. Meloche and H. H. Willard, 368.
- Waters:** Free and combined carbon dioxide (in —); Method for the estimation of. J. A. Shaw, 130.
- Waters:** Lead; Action of natural — on. J. C. Thresh, 459, 500.
- Waters:** Natural —; Hydrogen ion concentration of some. J. T. Saunders, 130.
- Wattle:** Calcium oxalate in Gidgee —; Occurrence of. T. Steel, 89.
- Weeds:** Field- —; The seeds and fruit of certain. J. Greger, 487.
- Weighting:** Silk; Rapid estimation of the — of. C. Tondani, 178.

Weights: Molecular — by means of osmotic pressure; Determination of. A. Foix, 454.

Wheat: Gluten. J. Gerum and C. Weizenkleber, 477.

Wheat Starch: —; Characteristics of. T. E. Wallis, 516.

Whiskey: Evaporation of —; Alleged (Legal Notes), 475.

White Metal: Copper, lead, antimony and tin; Separation and estimation of: Analysis of —. A. Kling and A. Lassieur, 134.

White Pigments: —; Analysis of. M. Lombard, 91.

Wine: Elderberry —. J. Prescher and R. Claus, 480.

Wine: Lees — and — lees; Composition of. L. Semichon, 302.

Wine Lees: Lees wine and —; Composition of. L. Semichon, 302.

Wine: Tannins and pigments in —; Estimation of. W. Fresenius and L. Grünhut, 26.

Wines: De-Acetication [Dépiquage] of —. L. Ferré, 401.

Wines: Sulphurous acid in —; Estimation of. Martini and A. Nourrisson, 211.

Wines: Sulphurous acid; Estimation of the volatile acidity of — containing. R. Marcille, 480.

Wood Extract: Cinchonine; Identification of — by means of. L. De Hesselle, 179.

Wood: Infection and decay of — and — pulp; Chemical changes involved during. M. W. Bray and J. A. Staidl, 175.

Wood Preservative: Zinc chloride as —. Report of Committee No. 4—Preservatives. 315.

Wood Preservation: Creosote for —; Standard specification for. (British Engineering Standards Association.) 71.

Wood Pulp: Infection and decay of wood and —; Chemical changes involved during. M. W. Bray and J. A. Staidl, 175.

Wood: Turpentine. C. A. Lambert, 406.

X

X-Rays: Mean penetrating power of a beam of — by a new radiochromometric method; Measurement of the. M. de Laroquette, 227.

Xenon: Spectrophotometry; Estimation of Krypton and — by. C. Moureu and A. Lepape, 272.

Xylenol Blue: Indicator in chemical and biochemical work; — as an. A. Cohen, 269.

Y

Yeast: Carbon monoxide in blood by means of brewers' —; Spectroscopic detection of. C. Strzyzanski, 358.

Yeast: Invertase activity of —; Effect of stimulants upon the. E. W. Miller, 82.

Yeast Method: Vitamin contents of rice by the —; Estimation of. W. D. Fleming, 81.

Yohimbine: Bark. J. Small and F. M. J. Andrews, 261.

Z

Zamia: Starch. J. F. Clevenger, 170.

Zinc Blende: Bacteria; Attack of minerals by. Oxidation of —. A. Helbronner and W. Rudolf, 307.

Zinc Chloride: Wood preservative; — as. Report of Committee No. 4—Preservatives. 315.

Zinc: Pyrophosphate; Estimation of — as. D. Balarew, 91.

Zinc: —; Volumetric estimation of. E. Monasch, 135.

Zirconium: Tantalum, columbium, and their mineral associates: I., Use of tartaric acid in the analysis of natural tantalocolumbates; II., Separation of — from tantalum and from columbium. W. R. Schoeller and A. R. Powell, 93.