

Errata in Vol. LIV.

P. 63 line 17, for "sodium sulphate" read "sodium sulphide."

P. 80 line 26 in the table, for "Iodine value of solid fatty acids, 101.5" read "10.15."

INDEX TO VOLUME LIV.

INDEX TO NAMES.

A

Abderhalden, E. Handbuch der Biologischen Arbeitsmethoden. Sect. IV. Die Refraktometrische Untersuchung der Milch. E. Reiss (Review), 127.

Adams, C. A., and Nicholls, J. R. Analysis of mixtures containing acetone, ethyl alcohol and isopropyl alcohol, 2.

Adams, R., and Conant, J. C. Organic Syntheses. Vols. VIII and IX (Review), 443.

Adderley, A. Cube photometer for comparing the whiteness of fabrics, 684.

Adriani, W. Sesamin and sesamol, 109.

Akimoff, I. G. See Okoloff, F. S., and Akimoff, I. G.

Alexander, J. Colloid Chemistry—Theoretical and Applied. Vol. II. Biology and Medicine (Review), 263.

Alfend, S. See Mitchell, L. C., and Alfend, S.

Allen, F. W., and Luck, J. M. New method for the determination of urea, 480.

Allen, R. N. Photomicrographs of Philippine starches, 686, 744.

Ambler, H. R. Apparatus for the analysis of small samples of gas, 517.

Amos, A. J. Rice husks in bran and sharps, 332.

Andersen, A., and Nightingale, E. Test for vitamin A in margarine, butter and other fatty foods, 481.

Anderson, H. V., and Clark, G. L. Application of X-rays in the classification of fibrous silicate minerals commonly termed asbestos, 771.

André, E., and Canal, H. Fatty oil of the "pilgrim" whale (*Cetorhinus Maximus*, Günner). Biological relations between the cholesterol and squalene, 605.

— Marine animal oils. Oil of *Centrophorus Granulosus*, 606.

Andrew, R. L. The cryoscopic method for the detection of added water in milk, 210.

Angell, H. R. See Link, K. P., Angell, H. R., and Walker, J. C.

Antoniani, C., and Bonetti, S. Application of the strychno-molybdic method to the determination of phosphoric acid in soil, 485.

Arnal, T. G. Y. Reagent for potassium, ammonium, rubidium and caesium ions, 369.

— The phosphoric ion as a sensitive reagent. Differentiation of antimony and tin, 256.

Arner, W. J. See Orthmann, A. C., and Arner, W. J.

Arup, P. Fall in Reichert-Meissl values on keeping butter samples, 736.

— Routine determination of salt in butter and margarine, 658.

— The composition of Irish winter butter, 634.

Aston, J. G. See Conant, J. B., and Aston, J. G.

Atack, F. W., Elworthy, R. T., and Turner, F. M. The Chemists' Year book, 1929 (Review), 563.

Aufrecht, —. Distinction between pressed and extracted cacao butter, 346.

Autenreith, W. Laboratory Manual for the Detection of Poisons and Powerful Drugs (Review), 126.

Avery, S. Carbon and hydrogen determinations with the use of a metal tube, 66.

B

Bagnall, H. H. Annual Report of the City Analyst for Salford for the year 1928, 740.

— Measurement of the strength of sunlight, 101.

Bailey, C. H. See Ferrari, C. G., and Bailey, C. H.

Bailey, E. H., and Bailey, H. S. Food Products, Their Source, Chemistry and Use, 130.

Bailey, H. S. See Bailey, E. H., and Bailey, H. S.

Baines, H. Volumetric method for determining silver in presence of halides and cyanides, 678.

Baker, L. C. See Drummond, J. C., and Baker, L. C.

Balls, A. K., and Wolff, W. A. Determination of morphine, 111.

Barnes, J. W. Sampling apples in the orchard for the determination of arsenical spray residue, 347.

Barry, T. H. Malayan lumbang oil, 677.

Barsutzkaja, S. See Glassmann, B., and Barsutzkaja, S.

Bartels, W. See Plücker, W., and Bartels, W.

Bartlett, S. Studies in milk secretion based on the variations and yields of milk and butter fat produced at morning and evening milkings, 179.

Barton-Wright, E. C., and Boswell, J. G. Biochemistry of dry-rot in wood, 358.

Baughman, W. F., and Jamieson, G. S. Chia seed oil, 677.

Baughman, W. F., Jamieson, G. S., and McKinney, R. S. American reindeer fat, 605.

Bäurle, A. See Stollenwerk, W., and Bäurle, A.

Bauschinger, C. See Täufel, K., and Bauschinger, C.

- Bayley, T.** A Pocket Book for Chemists, 264.
- Bechdel, S. I., Honeywell, H. E., Dutcher, R. A., and Knutsen, M. H.** Synthesis of vitamin B in the rumen of the cow, 55.
- Beck, K., and Caspar, E.** Albuminous compounds from the meat of different animals, 238.
- Benedict, S. R.** Purification of picric acid for creatinine determination, 428.
- Benedict, S. R., and Newton, E. B.** Use of molybdic acid as a precipitant for blood proteins, 428.
- Benesch, B.** Rapid method for the determination of selenium, 63, 191.
- Benzon, B.** See Bertrand, G., and Benzon, B.
- Berry, A. J.** Experiments on quantitative oxidation with ceric sulphate, 461.
- Bertram, S. H.** See Waterman, H. J., Bertram, S. H., and Van Westen, H. A.
- Bertrand, G., and Benzon, B.** Zinc contents of the principal vegetable foodstuffs, 349.
- Bethke, R. M., Zinzalian, G., Kennard, D. C., and Sassaman, H. L.** Antirachitic properties of cod liver meals, 182.
- Bye, L., and Faillebin, M.** A reaction of resorcinol and a new coloured indicator, 561.
- Bijlsma, U. G., Burn, J. H., and Gaddum, J. H.** Comparison of the oxytocic, pressor and anti-diuretic activities of commercial samples of pituitary extract, 298.
- Bills, C. E., and Honeywell, E. M.** Antirachitic substances. VIII. Studies on highly purified ergosterol and its ester, 53.
- Bird, O. D.** See Winter, O. B., and Bird, O. D. — See also Winter, O. B., Thrun, W. E., and Bird, O. D.
- Blankenhorn, M. A.** Urobilin content of normal human blood, 116.
- Bleyer, B., and Diemair, W.** Detection of fruit wine in grape wine, 603.
- Blicke, F. F., and Smith, F. D.** Identification of ortho-, meta- and para-hydroxybenzoic acids, 487.
- Bliss, S.** Quantitative determination of the amide nitrogen of blood, 180.
- Bloor, W. R.** Distribution of unsaturated fatty acids in tissues. III. Vital organs of beef, 112.
- Bloxam, H. C. L.** See Dunn, J. T., and Bloxam, H. C. L.
- Blumenthal, H.** Separation of lead and bismuth, 679.
- Bodea, C.** See Jonescu, M. V., and Bodea, C.
- Boehm, G.** Barium sulphate as indicator of the efficiency of sulphuric acid in drying apparatus, 373.
- Böeseken, J.** Constitution of α -elaeostearic acid, the most important component of Chinese wood oil (tung oil), 305. — See also Gelber, E. T., and Böeseken, J.
- Boivin, A.** General method for the micro-determination of carbon by the use of chromic acid oxidation, 117.
- Bömer, A., and Engel, H.** Glycerides of chaulmoogra oil, 423.
- Bone, W. A., Newitt, D. M., and Townend, D. T.** Gaseous Combustion at High Pressures, 692.
- Bonetti, S.** See Antoniani, C., and Bonetti, S.
- Borgstrom, P., and Reid, E. E.** Determination of mercaptans in naphtha, 767.
- Bosart, L. W., and Snoddy, A. O.** Specific gravity of glycerol, 186.
- Boswell, J. G.** See Barton-Wright, E. C., and Boswell, J. G.
- Bougault, J., and Leroy, Bl.** Determination of camphor in pharmaceutical preparations, 46.
- Bourset, P.** Determination of pilocarpine, 245.
- Bourdillon, R. B.** See Webster, T. A., and Bourdillon, R. B.
- Boyd, W. J.** Determination of tryptophan by means of *p*-dimethylaminobenzaldehyde, 354.
- Brackett, R.** See Gemmill, R., Brackett, R., and McCrosky, C. R.
- Bradley, H. F.** Modification of Low's short iodide method for copper, 63.
- Bragg, Sir W. H.** The Structure of an Organic Crystal, 130.
- Brandl, O.** See Moser, L., and Brandl, O.
- Braun, K., and Walter, E.** Determination of sugar in soap and soap preparations, 767.
- Bridge, S. W.** See Stephenson, J. E., and Bridge, S. W.
- Britton, H. T. S.** Hydrogen Ions: Their Determination and Importance in Pure and Industrial Chemistry (Review), 687.
- Brown, J. B.** Highly unsaturated fatty acid of liver lipids. Preparation of arachidonic acid, 113.
- Bruckner, H.** Decomposition of phenolsulphonic acids and purification of phenols by the sulphonic acid separation method, 189.
- Brukl, A.** See Moser, L., and Brukl, A.
- Brunel, A.** See Fosse, R., Brunel, A., and de Graeve, R.
- Buchan, J. L.** See Francis, A. G., Harvey, C. O., and Buchan, J. L.
- Bülow, C., and Dick, W.** β -methyl-umbelliferone as a fluorescent indicator, 63.
- Burn, J. H.** See Bijlsma, U. G., Burn, J. H., and Gaddum, J. H.
- Buston, H. W.** Isolation of mesaconic acid from cabbage leaves, 239.
- Butler, C. L., and Cretcher, L. H.** Composition of gum arabic, 477.
- Büttner, G., and Miermeister, A.** Evaluation of crab preparations and detection of crab ingredients, 546.

C

- Calingaert, G.** See Edgar, G., and Calingaert, G.
- Callan, T., and Henderson, J. A. R.** A new reagent for the colorimetric determination of minute amounts of copper, 650.
- Cameron, A. T.** A Textbook of Biochemistry, 314, 692.
- Cameron, D. H.** Determination of hydrogen ion concentration by a modified colorimetric method, 365.
- Canal, H.** See André, E., and Canal, H.
- Cannan, R. K.** See Richardson, G. M., and Cannan, R. K.

- Carpenter, T. M., Fox, E. L., and Serque, A. F.** Acetone as a control substance for respiration and gas analysis apparatus, 427.
- Caspar, E.** *See* Beck, K., and Caspar, E.
- Chalmeta, A.** *See* Herissey, H., and Chalmeta, A.
- Chandelle, R.** Adsorption of phosphoric acid by stannic sulphide, 769.
- Charonnat, R.** *See* Delaby, R., and Charonnat, R.
- Chatterji, D. N.** Report of the Chemical Examiner for the U.P. of Agra and Oudh for the year 1928, 474.
- Chernoff, L. H.** Monobromoguaiacol carbonate. Determination of guaiacol carbonate, 756.
- Christian, B. C., and Hilditch, T. P.** Seed fats of some cultivated species of umbelliferae, 547.
- Clark, G. L.** *See* Anderson, H. V., and Clark, G. L.
- Clark, J. H.** Zinc sulphide method of measuring ultra-violet radiation, and the results of a year's observations on Baltimore sunshine, 493.
- arke, C. O.** The protection of animal fibres against clothes moths and dermestid beetles, 126.
- Clarke, S. G.** The solubility of Reinsch antimony films in water, 99.
- Clarke, S. G., and Evans, B. S.** Method for the determination of traces of antimony in copper and its alloys, 23.
- Clarke, S. G., and Jones, B.** A new sensitive colour reaction of copper, 333.
- Clifford, W. M., and Mottram, V. H.** Determination of carnosine, 51.
- Cocking, T. T.** Compound tincture of benzoin, 46. — Petroleum spirit test for purity of castor oil, 548.
- Cole, S. W.** Practical Physiological Chemistry, 8th Ed. (Review), 70.
- Coles, L. A.** An Introduction to Modern Organic Chemistry, 502.
- Collin, E. A.** The electrolytic separation of lead and bismuth with controlled potential, 654.
- Collin, G., Hilditch, T. P., and Lea, C. H.** Component glycerides of a mutton tallow, 243.
- Conant, J. B.** *See* Adams, R., and Conant, J. B.
- Conant, J. B., and Aston, J. G.** New oxidation reactions of aldehydes, 57.
- Cooke, T. H.** The Kreis reaction as a method for the detection of incipient rancidity in cacao butter, 411.
- Cooksey, T.** Annual Report of the Government Analyst for New South Wales, for 1928, 597. Appendix, 601.
- Cooksey, T., and Walton, S. G.** Electrolytic determination of lead in urine, 97.
- Cooper, E. A., and Haines, R. B.** Bactericidal action of the nitroso compounds, 357.
- Corl, C. S.** *See* Gnadinger, C. B., and Corl, C. S.
- Corley, R. C.** Metabolism of laevulose, with a colorimetric method for its determination in blood and urine, 180.
- Coste, J. H.** A nomogram for converting observed volumes of gas to normal temperature and pressure, 656.
- Couture, E.** *See* Hugounenq, L., and Couture, E.
- Coward, K. H.** Variations in amounts of the antirachitic vitamin in different samples of cod-liver oil, milk and butter, 302.
- Cox, H. E.** The chemical examination of furs in relation to dermatitis, 694.
- Crandall, W. R.** *See* Thurman, B. H., and Crandall, W. R.
- Creighton, H. J.** Principles and Applications of Electrochemistry (Review), 192.
- Crennell, J. T., and Lea, F. M.** Alkaline Accumulators, 130.
- Cretcher, L. H.** *See* Butler, C. L., and Cretcher, L. H.
- Crist, J. W., and Dye, M.** Association of vitamin A with greenness in plant tissue. II. Vitamin A content of asparagus, 300.
- Culp, F. B.** *See* Remington, R. E., Culp, F. B., and von Kolnitz, H.

D

- Daggett, A. F.** Application of the thiocyanate method for the precipitation of copper to the confirmatory tests for cadmium and antimony, 679.
- Danielson, I. S.** *See* Norris, E. R., and Danielson, I. S.
- Das-Gupta, P. N.** Use of phenolic acids in the detection, separation and determination of metals. Part I. Separation of group 2A metals, 678.
- Dauvé, —.** Detection of arsenic, 56.
- David, M.** *See* Sisley, P., and David, M.
- Davis, J. D., and Younkins, J. A.** Electrostatic method for the determination of fusain in bituminous coal, 616.
- De Graeve, R.** *See* Fosse, R., Brunel, A., and de Graeve, R.
- Dehe, H.** Two new methods for determining phenol in waste liquors, 121.
- De La Bruere, M. A.** Colour-measurement of tanning extracts, 124.
- Delaby, R., and Charonnat, R.** Separator for fractional distillation under reduced pressure, 124.
- De Nardo, L. U.** The pyrogallol method for the determination of nitrates in soil and waters, 360.
- Denigès, G.** Identification of yohimbine by microcrystallography, 179.
- Desvergnès, L.** Colour reaction of diphenylamine, 243.
- Dick, W.** *See* Bülow, C., and Dick, W.
- Diemair, W.** *See* Bleyer, B., and Diemayer, B.
- Dixon, B. E.** The determination of small quantities of beryllium in rocks, 268.
- Dobbin, L., and Mackenzie, J. E.** Salts and their Reactions, 314.
- Dodd, A. S.** A new test for boric acid and borates, 282.
- A study of the methods of determining boron compounds in food and drugs, 645. Part II. Experimental: Effect of fats and other organic substances on the determination, 715.
- Natural occurrence of boron compounds in fruits and vegetable products, 15.

- Dodgson, R. W.** Report on mussel purification (Ministry of Agriculture and Fisheries), 158.
- Doeuve, J.** Use of ozone for the determination of the constitution of unsaturated compounds, 361.
- Dorrington, B. J. F., and Ward, A. M.** Potassium cyanate as a reagent for the detection of cobalt, 327.
- Drakeley, T. J., and Nicol, H.** Absorption of oxygen by alkaline pyrogallol, 306.
- Drew, H. D. K., and Porter, C. H.** Micro-determination of selenium and tellurium in organic compounds, 683.
- Drummond, J. C.** See Duliere, W., Morton, R. A., and Drummond, J. C.
- Drummond, J. C., and Baker, L. C.** Composition of wool fat, 607.
— Further studies of the chemical nature of vitamin *A*, 557.
- Drummond, J. C., and Morton, R. A.** Observations on the assay of vitamin *A*, 763.
- Dubsky, J. V., and Okáč, A.** Reactions of dye-stuffs with nitrous acid, 60.
- Dufrenoy, J.** Cytological study of water-soluble and fat-soluble constituents of citrus, 431.
- Duliere, W., Morton, R. A., and Drummond, J. C.** Alleged relation of carotin to vitamin *A*, 764.
- Dunn, J. T., and Bloxam, H. C. L.** Boric acid in oranges, 28.
- Dunnicliff, H. B., and Suri, H. D.** The volumetric determination of mercury, 405.
- Dureuil, E.** See Van Štok, D., Dureuil, E., and Heudebert.
- Durham, E. H., Gaddum, J. H., and Marchal, J. E.** Toxicity tests for novarsenobenzene (neosalvarsan). Medical Research Council Special Report No. 128, 667.
- Dutcher, R. A.** See Bechdel, S. I., Honeywell, H. E., Dutcher, R. A., and Knutsen, M. H.
- Dworzak, R., and Reich-Rohrwig, W.** Simultaneous determination of orthophosphate and pyrophosphate, 435.
- Dye, M.** See Crist, J. W., and Dye, M.
- E**
- Ebert, H. L.** See Lange, N. A., Ebert, H. L., and Youse, L. K.
- Eckert, J. E., and Spindler, L. A.** Vitamin *D* and resistance of chickens to parasitism, 356.
- Edgar, G., and Calingaert, G.** Reactions of tetraethyl lead, 768.
- Egorow, M. S.** New method for the quantitative determination of ozone in air, 189.
- Elder, A. L.** See Holmes, H. N., Ramsay, J., and Elder, A. L.
- Elsdon, G. D.** Annual report of the Public Analyst for the County of Lancaster for the year 1928, 465.
— See also Evers, N., and Elsdon, G. D.
- Elsdon, G. D., and Stubbs, J. R.** The refraction of milks low in solids-not-fat, 318.
- Elten, —.** Tin-foil as a packing for rindless cheese, 552.
- Elvehjem, C. A.** See Lindow, C. W., Elvehjem, C. A., and Peterson, W. H.
— See also Waddell, J., Steenbock, H., Elvehjem, C. A., and Hart, E. B.
- Elvehjem, C. A., and Hart, E. B.** Copper content of feedingstuffs, 421.
- Elvehjem, C. A., and Lindow, C. W.** Determination of copper in biological materials, 245.
- Elvehjem, C. A., Steenbock, H., and Hart, E. B.** Distribution of copper in blood, 555.
— Effect of diet on the copper content of milk, 555.
- Elworthy, R. T.** See Atack, F. W., Elworthy, R. T., and Turner, F. M.
- Emmert, E. M.** Chlorate method for determining nitrate nitrogen, total nitrogen and other elements in soils and plant tissues, 491.
- Engel, H.** See Bömer, A., and Engel, H.
- Engemann.** See Frick and Engemann.
- Englis, D. T., and Mills, V. C.** A more stable alcoholic potash reagent for saponification, 493.
- Ensoll, R.** Bayley's Chemists' Pocket Book, 9th Ed. (Review), 495.
- Eppenberger, W.** See Treadwell, W. D., and Eppenberger, W.
- Ernst, F. A.** Fixation of Atmospheric Nitrogen (Review), 195.
- Escher, H. H.** Conversion of higher fatty acids into their barium salts, 252.
- Etheridge, A. T.** The determination of aluminium in steel, 141.
- Evans, B. S.** A method for the separation and determination of arsenic, 523.
— A rapid method for dissolving high chromium steels for the determination of sulphur, 286.
— Some analytical applications of sodium hydro-sulphite (Antimony, bismuth, lead, cadmium), 395.
— See also Clarke, S. G., and Evans, B. S.
- Evans, J., and Jones, A. O.** The determination of small amounts of alcohol in the human subject, 134.
- Evans, O. M.** See Furman, N. H., and Evans, O. M.
- Everett, M. R.** Determination of sugar in blood. I. Observations upon Benedict's alkaline copper solution, 430.
- Evers, N.** Antimony trichloride colour test for vitamin *A*, 612.
- Evers, N., and Elsdon, G. D.** The Analysis of Drugs and Chemicals (Review), 774.
- Eynon, L., and Lante, J. H.** Starch: Its Chemistry, Technology and Uses (Review), 373.
- F**
- Fabre, R., and Picon, M.** Distribution of bismuth in the organs after injection of aqueous solutions, 252.
— Toxicological study of bismuth, 55.
- Faillebin, F.** See Bey, L., and Faillebin, M.
- Fales, H. A.** Inorganic Quantitative Analysis, 314, 502.

- Farbsalz-Gesellschaft, Berlin.** Determination of the purity of potassium and sodium ferrocyanides by titration with zinc sulphate solution, 437.
- Farnsworth, M.** The Theory and Technique of Quantitative Analysis, 502.
- Faust, O.** Artificial Silk (Review), 497.
- Fear, C. M.** Sanio's potassium dichromate test for tannins, 227.
— The alkaloid test for tannins, 316.
- Ferrari, C. G., and Bailey, C. H.** Determination of carotin in flour, 604.
- Ferrey, G. J. W.** Determination of nitrates in bismuth carbonate, 756.
- Fiehe, J.** Quantitative determination of oxymethylfurfural in honey, 108.
- Fiehe, J., and Kordatzki, W.** Examination of honey, 748.
— Quantitative determination of oxymethylfurfural in honey and artificial honey, 241.
- Field, A.** See Morgan, A. F., and Field, A.
- Finlay, T. Y.** See Watson, C., Finlay, T. Y., and King, J. B.
- Firth, J. B.** Chemistry in the Home (Review), 625.
- Fitelson, J.** Comparison of the Monier-Williams and the A.O.A.C. methods for the determination of sulphurous acid in food products, 297.
- Flinn, F. B., and Inouye, J. M.** Some physiological aspects of copper in the organism, 758.
- Flugge-de-Smid, R. A. H.** Recent devices for measuring the flow of air, 126.
- Folin, O.** Note on the new ferricyanide method for blood sugar, 246.
- Folin, O., and Marenzi, A. D.** Improved colorimetric method for the determination of cystine in proteins, 553.
- Fölsner, A.** Detection of vanadium, 308.
- Fosse, R., Brunel, A., and De Graeve, P.** Biochemical determination of allantoin in presence of urea, 479.
— Enzymic conversion of uric acid into allantoinic acid, 557.
- Foulk, C. W., and Horton, P. G.** Preparation of antimony-free arsenious oxide and determination of minute amounts of antimony in arsenious oxide, 619.
- Fowweather, F. S.** A Handbook of Clinical Chemical Pathology (Review), 775.
- Fox, E. L.** See Carpenter, T. M., Fox, E. L., and Sereque, A. F.
- Francis, A. G., Harvey, C. O., and Buchan, J. L.** Determination of small quantities of lead, with special reference to urine and biological materials, 725.
- François, M., and Sequin, L.** Quantitative determination of methylene blue, 551.
- Fred, E. B.** See Preuss, L. M., Peterson, W. H., and Fred, E. B.
- Frerichs, G.** Arsenic test of the German Pharmacopoeia, 56.
- Frey, R. W., Leinbach, L. R., and Reed, E. O.** English bookbinding leathers, 364.
- Frick and Engemann.** New method for the separation of lead and bismuth, 617.
- Fulton, C. C.** Identification of atropine by means of Wagner's reaction, 608.
- Furman, N. H., and Evans, O. M.** Ceric sulphate in volumetric analysis. V. Potentiometric study of the reaction between ferrocyanide and ceric ions, 371.
- Furman, N. H., and Wallace, J. H.** Ceric sulphate in volumetric analysis. VI. Oxidation of hydrogen peroxide by ceric sulphate. Indirect determination of lead, 490.

G

- Gaddum, J. H.** See Bijlsma, U. G., Burn, J. H., and Gaddum, J. H.
— See also Durham, E. H., Gaddum, J. H., and Marchal, J. E.
- Gaffre, A.** Determination of thio-semi-carbazide by means of iodine, 188.
- Gallup, W. D.** Determination of the digestibility of protein by Bergeim's method, 247.
- Gelber, E. T., and Böseken, J.** Determination of the iodine value. II. Action of iodine chloride solutions on fatty acids with conjugated double linkings, 305.
- Gemmil, R., Brackett, R., and McCrosky, C. R.** Confirmatory test for aluminium, 366.
- Germuth, F. G., and Mitchell, C.** Sodium alizarinsulphonate as a reagent, 308.
- Gertler, S. I.** See Jamieson, G. S., and Gertler, S. I.
- Ghose, T. P.** See Krishna, S., and Ghose, T. P.
- Gilman, H., and Heck, L. L.** Qualitative colour test for reactive organo-metallic compounds, 186.
- Gilman, H., and King, W. B.** Quantitative analysis of tin in organic compounds, 365.
- Gittinger, G. S.** See Munch, J. C., and Gittinger, G. S.
- Glassmann, B., and Barsutzkaja, S.** Volumetric method for the determination of tin in preserves and other foodstuffs, 110.
- Glassmann, B., and Posdeew, A.** Chemical detection of vitamin C, 432.
- Glasse, S.** Chemistry in Daily Life, 692.
- Glennie, A. E.** Index to the literature of food investigation, No. 1, 566.
- Gnadinger, C. B., and Corl, C. S.** Pyrethrum flowers. I. Determination of the active principles, 754.
- Gobert, S.** Determination of caffeine in tea, 110.
- Goddard, V. R., and Mendel, L. B.** Plant haemagglutinins with special reference to a preparation from the navy bean, 429.
- Gore, H. C.** Action of papain on the polarisation of gelatin. Measurement of proteolytic activity, 762.
- Gottfried, A.** Formol titration in the investigation of honey, 670.
- Grant, J.** Solubility of antimony in water, 227.
- Gray, J. D. A.** Isolation of *B. paratyphosus* B from sewage, 184.
- Greenberg, D. M.** Colorimetric determination of the serum proteins, 428.
- Greenwald, I.** Chemistry of Jaffe's reaction for creatinine. V. Isolation of the red compound, 60.

- Gregory, R., and Pascoe, T.** Quantitative determination of bile acids by means of a new colour reaction and monochromatic light, 554.
- Grey, E. C.** Iodimetric determination of iron, 256.
- Grier, W. D.** Identification of rayon (artificial silk), 364.
- Griffith, R. H., and Holliday, G. C.** Determination of iron carbonyl, 62.
- Griffon, H.** *See* Leulier, A., and Griffon, H.
- Grigg, F. J. T.** Distribution of arsenic in a body in a fatal case of poisoning by hydrogen arsenide, 659.
- Gronover, A., and Wohnlich, E.** Lead in red glaze, 552.
- Gros, R.** Use of piperazine in the analysis of urine and blood, 49.
- Grossfeld, J., and Miermeister, A.** Detection of coconut oil and palm kernel oil by means of a test for lauric acid, 242.
- Occurrence, detection and determination of lauric acid in alcoholic beverages, 108.
- Gustus, E. L.** *See* Jacobs, W. A., and Gustus, E. L.
- ## H
- Haag, H. B., and Hatcher, R. A.** Keeping properties of digitalis and some of its preparations, 608.
- Haas, P., and Hill, T. G.** An Introduction to the Chemistry of Plant Products. Vol. II. Metabolic Processes (Review), 775.
- Haase, L. W.** Determination of small quantities of copper with 5, 7-dibromo-*o*-oxyquinoline, 618.
- *See also* Marsson, V., and Haase, L. W.
- Haber, E. S.** *See* House, M. C., Nelson, P. M., and Haber, E. S.
- Haines, R. B.** *See* Cooper, E. A., and Haines, R. B.
- Hall, W. T.** Analytical Chemistry. Vol. II. Quantitative (Review), 258.
- Oxalate method for separating calcium and magnesium, 65.
- Hallett, H. S.** *See* Mattick, E. C. V., and Hallett, H. S.
- Hammer, B. W.** Dairy Bacteriology (Review), 442.
- Hamy, A.** Quantitative separation of dextrans and gum arabic, 253.
- Han, J. E. S.** Iodimetric determination of chromium (chromic oxide) in chrome alum, 307.
- Monosodium glutamate as a chemical condiment, 751.
- Hanes, C. S.** Application of the method of Hagedorn and Jensen to the determination of larger quantities of reducing sugars, 349.
- Hansen, H. V.** Accelerated exposure test for varnishes and lacquers, 192.
- Hanus, J., and Hovorka, V.** Reaction of cupric salts with thiosulphate, 254.
- Harding, E. P.** *See* Stoppel, A. E., and Harding, E. P.
- Hardy, F., and Lewis, A. H.** Rapid electro-metric method for measuring the "lime requirements" of soils, 184.
- Hardy, Z.** *See* Pénau, M. H., and Hardy, Z.
- Harmsma, A.** *See* Van Italie, L., Steenhauer, A. J., and Harmsma, A.
- Harris, L. J., and Moore, T.** "Hypervitaminosis" and "vitamin balance," 249.
- Harrison, D. C.** *See* Mellanby, E., Surie, E., and Harrison, D. C.
- Hart, E. B.** *See* Elvehjem, C. A., and Hart, E. B.
- *See also* Elvehjem, C. A.; Steenbock, H., and Hart, E. B.
- *See also* Waddell, J., Steenbock, H., Elvehjem, C. A., and Hart, E. B.
- Hart, L.** Analysis of insecticides containing fluorine compounds, 621.
- Hart, M. C.** *See* Speer, J. H., Wise, E. C., and Hart, M. C.
- Hart, R.** Determination of neutral fat in sulphonated oils, 306.
- Harvey, C. O.** *See* Francis, A. G., Harvey, C. O., and Buchan, J. L.
- Hassan, A.** Glucose in normal urine, 50.
- Hatcher, R. A.** *See* Haag, H. B., and Hatcher, R. A.
- Hawkins, J. A.** Micro time method for the determination of reducing sugars, and its application to analysis of blood and urine, 750.
- Reducing powers of different sugars for the ferricyanide reagent used in the gasometric sugar method, 749.
- Heck, L. L.** *See* Gilman, H., and Heck, L. L.
- Hefferman, P.** Biophysics of silica and etiology of silicosis, 757.
- Silica in mineral waters, 686.
- Heilingötter, R.** *See* Wolf, H., and Heilingötter, R.
- Heim, O.** The determination of cobalt in driers, japans, alloys, etc., 464.
- The determination of formaldehyde in certain pharmaceutical preparations, 537.
- Henderson, A., and Roberts, J.** Automatic pipette, 727.
- Henderson, J.** *See* Marsh, F., and Henderson, J.
- Henderson, J. B.** Report of the Government Analyst for Queensland for the year ending June 30, 1929, 746.
- Henderson, J. A. R.** *See* Callan, T., and Henderson, J. A. R.
- Hendriksz, R. D., and Reclaire, A.** Determination of ionone, 122.
- Henne, A. L.** A laboratory ozoniser, 685.
- Hennig, K.** *See* Von der Heide, C., and Hennig, K.
- Henville, D.** Annual Report of the Borough Analyst for Stepney for the year 1923, 540.
- The detection, determination and oxidation of sulphur dioxide, 228.
- Henville, D., and Pauley, W. M.** Dyes as an indication of adulteration in butter, 413.
- Hérissey, H., and Chalmeta, A.** Determination of reducing sugars, especially dextrose, in presence of hydrocyanic acid by means of alkaline copper solutions, 43.
- Determination of reducing sugars, particularly of glucose, by alkaline copper solutions in the presence of hydrocyanic acid, 421.

- Heuberger, K.** Rapid determination of tin in tinplate, 769.
- Heudebert, —** See Van Stolk, D., Dureuil, E., and Heudebert.
- Hewer, C. L.** Preservation of anaesthetic ether, 352.
- Hildebrand, J. G.** See Raiford, L. C., and Hildebrand, J. G.
- Hilditch, T. P.** Catalytic Processes in Applied Chemistry, 314.
— See also Christian, B. C., and Hilditch, T. P.
— See also Collin, G., Hilditch, T. P., and Lea, C. H.
- Hilditch, T. P., and Jones, E. E.** The fatty acids and component glycerides of some New Zealand butters, 75, 152.
- Hill, T. G.** See Haas, P., and Hill, T. G.
- Hiller, A.** See Van Slyke, D. D., and Hiller, A.
- Hinks, E.** Annual Address of the President, 201.
- Hirsch, P.** See Tillmans, J., Hirsch, P., and Reinshagen, E.
- Hirt, J.** Determination of sparteine, 672.
- Hoagland, R.** Antineuritic and water-soluble B vitamins in beef and pork, 432.
- Hobson, R. P.** Micro-method for determining semicarbazones and its application to the analysis of ketones, 562.
— See also Tattersfield, F., and Hobson, R. P.
- Hoeppe, R. W.** See Swift, E. H., and Hoeppe, R. W.
- Hobson, R. P.** See Tattersfield, I. F., and Hobson, R. P.
- Holborow, A. G.** Examination of goats' milk for unboiled milk, 658.
— Report of the City Analyst and Bacteriologist for Gibraltar for 1927, 104; for 1928, 592.
- Holliday, G. C.** See Griffith, R. H., and Holliday, G. C.
- Holmes, H. N., Ramsay, J., and Elder, A. L.** Platinised silica gels as catalysts for the oxidation of sulphur dioxide, 771.
- Holmyard, E. J.** Qualitative Analysis, 130.
- Honeywell, E. M.** See Bills, C. E., and Honeywell, E. M.
- Honeywell, H. E.** See Bechdel, S. I., Honeywell, H. E., Dutcher, R. A., and Knutsen, M. H.
- Horat, L. E.** See Sullivan, J. T., and Horat, L. E.
- Horton, P. G.** See Foulk, C. W., and Horton, P. G.
- Hough, G. J.** Determination of bismuth, 308.
- House, M. C., Nelson, P. M., and Haber, E. S.** The vitamin A, B and C content of artificially versus naturally ripened tomatoes, 301.
- Houston, J.** An improved micrometer, 30.
- Hovorka, V.** See Hanus, J., and Hovorka, V.
- Howarth, W. O.** New method of mounting vegetable powders for microscopical examination, 494.
- Hoyle, E.** Vitamin content of honey, 356.
- Hughes, E. B.** See Lampitt, L. H., Hughes, E. B., and Rooke, H. S.
- Hughes, J. S.** See Titus, R. W., and Hughes, J. S.
- Hugouenq, L., and Couture, E.** Action of cholesterol from cod-liver oil on a photographic plate, 182.
— Photochemical action of various sterols, 302.
- Hunter, A.** Creatine and Creatinine (Review), 195.
— Creatine content of the muscles and some other tissues in fishes, 299.
- Hurd, C. D.** The Pyrolysis of Carbon Compounds (Review), 689.
- Hyman, M.** Automatic pipette, 125.
- Hymas, F. C.** Photo-chemical methods of testing sources of ultra-violet radiation, 622.

I

Inouye, J. M. See Flinn, F. B., and Inouye, J. M.

J

Jacobs, W. A., and Gustus, E. L. The digitalis glucosides. III. Gitoxigenin and isogitoxigenin, 425.

Jahn, C. See Schoeller, W. R., and Jahn, C.

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

— See also Baughman, W. F., Jamieson, G. S., and McKinney, R. S.

Jamieson, G. S., and Gertler, S. I. American safflower oil, 347.

— Pecan oil, 750.

Jamieson, G. S., and McKinney, R. S. Composition of Californian walnut oil, 241.

— Palm oil from the Belgian Congo, 477.

Jansen, B. C. P. Improvements in the method of isolating the anti-beri-beri vitamin, 613.

Jilek, A., and Lukas, J. Electro-analytic determination of thallium as thallic oxide, 681.

— Separation of tungsten from vanadium, 490.

— Titration of thallic salts with permanganate in hydrochloric acid solution, 255.

Joglekar, R. B., and Watson, H. E. Physical properties of pure triglycerides, 117.

Johns, H. J. Fertilisers and Feeding Stuffs Act, 1926 (Review), 196.

Johnston, E. S. Importance of boron in plant growth, 48.

Jones, A. O. See Evans, J., and Jones, A. O.

Jones, B. The determination of small amounts of nickel in steel, 582.

— See also Clarke, S. G.; and Jones, B.

Jones, E. E. See Hilditch, T. P., and Jones, E. E.

Jones, T. W. Hermes or the Future of Chemistry, 130.

Jonescu, M. V., and Bodea, C. New reaction for the identification of urotropine in wines, 548.

Jonescu-Matiu, A., and Popesco, A. Quantitative analysis of certain medicinal preparations containing mercury, 609.

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

K

Kahn, B. S. See Roe, J. H., and Kahn, B. S.

Kahn, B. S., and Leiboff, S. L. Colorimetric determination of inorganic sulphate in small amounts of urine, 115.

- Kameyama, N., and Oka, S.** Synthesis of Japanese acid clay, 65.
— Synthetic Japanese acid clay, 562.
— The benzidine colour reaction of Japanese acid clay, 562.
- Kaufmann, H. P.** Absorption spectra and fluorescence of fats, 309.
- Kaufmann, H. P., and Keller, M.** Analysis by means of the thiocyanogen value of fats containing linolenic acid. Analysis of linseed oil, 304.
- Kaufmann, H. P., and Lutenberg, C.** Partial halogen addition to unsaturated fatty acids. β -Elaeostearic acid glyceride and wood oil, 304.
- Kay, R. R., and McCandlish, H. C.** Factors affecting the yield and quality of milk. I. The age of the cow, 353.
- Keane, C. A., and Thorne, P. C. L.** Lunge and Keane's Technical Methods of Chemical Analysis, 2nd Ed. (Review), 66.
- Kegel, McNally and Pope.** Methyl chloride poisoning, 676.
- Keller, M.** See Kaufmann, H. P., and Keller, M.
- Kennard, D. C.** See Bethke, R. M., Zinzalian, G., Kennard, D. C., and Sassaman, H. L.
- Kennedy, C., and Palmer, L. S.** Heat and ultra-violet irradiation as means of differentiating vitamins *B* and *G* in yeast, 674.
- Kenny, W. R.** See McCrumb, F. R., and Kenny, W. R.
- Kerchow, F.** New melting point apparatus, 309.
- King, E. J.** Determination of silica in tissues, 52.
- King, J.** The identification of apiol, 567.
- King, J. B.** See Watson, C., Finlay, T. Y., and King, J. B.
- King, W. B.** See Gilman, H., and King, W. B.
- Kilborn, R. B.** See Pierce, H. B., and Kilborn, R. B.
- Kisseleva, V. E.** See Panfilov, A. V., and Kisseleva, V. E.
- Kistiakowski, G. B.** Photochemical Processes (Review), 127.
- Kleinmann, H.** See Yoe, J. H., and Kleinmann, H.
- Klockow, R. F.** See Lewis, J. R., and Klockow, R. F.
- Klotz, L.** Comparative study of methyl and ethyl protocatechuic aldehyde, 752.
- Knapp, A. W.** See Moss, J. E., and Knapp, A. W.
- Knop, J.** Colour indicators for permanganate solutions. Determination of ferrocyanide, 437.
- Knop, J., and Kubelkova, O.** Colour indicators for permanganate titrations. Determination of iron, 437.
- Knowles, H. B.** See Lundell, G. E. F., and Knowles, H. B.
- Knudson, A., and Moore, C. N.** Comparison of the antirachitic potency of ergosterol irradiated by ultra-violet light and by exposure to cathode rays, 183.
- Knutsen, M. H.** See Bechdel, S. I., Honeywell, H. E., Dutcher, R. A., and Knutsen, M. H.
- Kny-Jones, F. G., and Ward, A. M.** Preparation and properties of xanthidrol as a reagent for urea, 574.
- Kobayashi, K., and Yamamoto, Y.** Genesis of Japanese acid clay, 562.
- Kolbach, P.** See Windisch, W., Kolbach, P., and Winter, M.
- Kolthoff, I. M.** The Practice of Volumetric Analysis. Part II (Review), 257.
— Uranyl zinc acetate as reagent for the quantitative determination of sodium, 435.
— Volumetric Analysis. Vol. I. Theoretical Principles of Volumetric Analysis (Review), 194. Vol. II. Practical Volumetric Analysis (Review), 691.
- Kolthoff, I. M., and Sandell, E. B.** Volumetric determination of manganese as dioxide, 769.
- Kordatzki, W.** See Fiehe, J., and Kordatzki, W.
- Kossel, A.** The Protamines and Histones (Review), 71.
- Koska, G.** The ultra-violet-detector as an aid in distinguishing real amber from its imitations, 256.
- Krishna, B. H. R., and Sreenivasaya, M.** Determination of pyruvic acid, 59.
- Krishna, S., and Ghose, T. P.** Indian ephedras. Their extraction and assay, 297.
- Kubelkova, O.** See Knop, J., and Kubelkova, O.

L

- Lackey, J. B.** See Rudolfs, W., and Lackey, J. B.
- Lallemand, (Mme) S.** Cellular toxicity of gaseous and volatile poisons, 359.
- Lampitt, L. H., Hughes, E. B., and Rooke, H. S.** Furfural and diastase in heated honey, 381, 736.
- Lamplough, F. E.** The properties and applications of "Vita" glass, 495.
- Lamson, P. D., Robbins, B. H., and Ward, C. B.** Pharmacology and toxicology of tetrachloroethylene, 358.
- Lane, J. H.** See Eynon, L., and Lane, J. H.
- Lange, N. A., Ebert, H. L., and Youse, L. K.** Relations between constitution and taste of pungent principles, 480.
- Latzke, A.** Penetration of ultra-violet rays through fabric, 484.
- Lauro, M. F.** See Trevithick, H. P., and Lauro, M. F.
- Lawrie, J. W.** Glycerol and the Glycols (Review), 128.
- Lea, C. H.** Component glycerides of cacao butter, 242.
— See also Collin, G., Hilditch, T. P., and Lea, C. H.
- Lea, F. T.** See Crennell, J. T., and Lea, F. M.
- Leavenworth, C. S.** See Vickery, H. B., and Leavenworth, C. S.
- Leffmann, H., and Pines, C. C.** Tests for methanol, 671.
- Lehrman, L.** Fatty acids associated with rice starch, 548.
- Leiboff, S. L.** Colorimetric method for determination of lipoidal phosphorus in blood, 50.
— See also Kahn, B. S., and Leiboff, S. L.
- Leinbach, L. R.** See Frey, R. W., Leinbach, L. R., and Reed, E. O.

- Leiter, L. W.** The Eijkman fermentation test as an aid in the detection of faecal organisms in water, 484.
- Leroy, Bl.** See Bougault, J., and Leroy, Bl.
- Leulier, A., and Griffon, H.** Colorimetric determination of strophanthins, 672.
- Levene, P. A.** See Taylor, F. A., and Levene, P. A.
- Lewis, A. H.** See Hardy, F., and Lewis, A. H.
- Lewis, J. R., and Klockow, R. F.** Use of potassium iodate in back titration for the determination of the hypochlorite content of solutions, 123. •
- Lewis, S. J.** Report on the International Society of Medical Hydrology, 33.
- Leysaht, H.** Determination of sulphur in galena and lead, 489.
- Lindow, C. W.** See Elvehjem, C. A., and Lindow, C. W.
- Lindow, C. W., Elvehjem, C. A., and Peterson, W. H.** Copper content of plant and animal foods, 420.
- Linhorst, E. F.** Determination of vapour densities at room temperatures, 372.
- Link, K. P., Angell, H. R., and Walker, J. C.** Isolation of protocatechuic acid from pigmented onion scales, 240.
- List, F.** See Mose, L., and List, F.
- Liverseege, J. F.** Report of the City Analyst for Birmingham for the Third Quarter of 1928, 31; for the Fourth Quarter of 1928, 155; Annual Report for 1928, 414.
- Löffler, H.** Determination of hygroscopic moisture in coals, 433.
- Lorman, Ch.** Determination of chloral in syrup of chloral, 244.
- Lowe, H.** Poisoning by bitter-sweet (*Solanum Dulcamara*), 153.
- Lucas, A.** The nature of the colour of pottery, with special reference to that of ancient Egypt, 686.
- Lucius, F.** See Nottbohm, F. E., and Lucius, F.
- Luck, J. M.** See Allen, F. W., and Luck, J. M.
- Lukas, J.** See Jilek, A., and Lukas, J.
- Lundell, G. E. F., and Knowles, H. B.** Separation of aluminium by 8-hydroxyquinoline, 770.
- Lutenberg, C.** See Kaufmann, H. P., and Lutenberg, C.
- M**
- Mackenzie, J. E.** See Dobbin, L., and Mackenzie, J. E.
- Maclairin, J. S.** Report of the Dominion Analyst for New Zealand for the year 1927, 289.
- MacLennan, K.** See Morgan, R. S., and MacLennan, K.
- Mahau, —.** Method of identification and determination of the value of rhubarbs, based on fluorescence, 478.
- Mändlen, H.** See Von der Heids, C., and Mändlen, H.
- Manley, C. H.** Report of the City Analyst for Leeds for the Third quarter of 1928, 103; for the Second and Third Quarters of 1929, 739. — The production of uniform stains in the Gutzeit test for arsenic, 30.
- Mantell, C. L.** Industrial Carbon (Review), 622.
- Marcen, A.** Report of the Director of the Government Laboratory, Siam, for the year ending March 31st, 1928, 475.
- Marchal, J. E.** See Durham, E. H., Gaddum, J. H., and Marchal, J. E.
- Marcille, R.** Fachini's reaction for the detection of olive residue oils, 346.
- Marenzi, A. D.** See Folin, O., and Marenzi, A. D.
- Margosches, B. M.** Chemical Analysis. Vol. XXVI (Review), 310.
- Marks, S., and Morrell, R. S.** The determination of organic peroxides, 503.
- Marlow, G. S. W.** Law and Industry, 692.
- Marsh, F., and Henderson, J.** Occurrence of the tetanus bacillus in canned peas, 536.
- Marsson, V., and Haase, L. W.** Precipitation of lead by *o*-oxyquinoline, 122.
- Masters, H.** See Tinkler, C. K., and Masters, H.
- Matthews, N. W.** Detection and determination of sucrose by the ammonium molybdate method, 43.
- Matthews, R.** Cold test of fatty oils, 433.
- Mattick, E. C. V., and Hallett, H. S.** Effect of heat on milk. (a) On the coagulability by rennet, and (b) on the nitrogen, phosphorus and calcium contents, 557.
- Maunier, M. E.** Les Plantes à Parfums des Colonies Françaises (Review), 129.
- McAlister, E. D.** See Williams, R. J., McAlister, E. D., and Roehm, R. R.
- McCandlish, H. C.** See Kay, R. R., and McCandlish, H. C.
- McClendon, J. F., and Remington, R. E.** Determination of traces of iodine in vegetables, 239.
- McClosky, W. T., and Munch, J. C.** Bio-assay of commercial pituitary powders, 298.
- McCrosky, C. R.** See Gemmill, R., Brackett, R., and McCrosky, C. R.
- McCrum, F. R., and Kenny, W. R.** Use of cresol red in acid solutions, 489.
- McKinney, R. S.** See Baughman, W. F., Jamieson, G. S., and McKinney, R. S.
- See also Jamieson, G. S., and McKinney, R. S.
- McLaughlin, L.** Relation of vitamin A content to size of leaves, 764.
- McLean, W.** See Robinson, G. W., McLean, W., and Williams, R.
- McMurtrey, J. E.** Effect of boron deficiency on the growth of tobacco plants in aerated and unaerated solutions, 427.
- McNally, —.** See Kegel, McNally and Pope.
- Mees, R. T. A.** Determination of honey in honey cake, 108.
- Mellanby, E., Surie, E., and Harrison, D. C.** Vitamin D in ergot of rye, 766.
- Mellor, J. W.** A Comprehensive Treatise on Inorganic and Theoretical Chemistry. Vol. IX (Review), 377.
- Mendel, L. B.** See Goddard, V. R., and Mendel, L. B.

- Meno, I. S., Yamashita, M., and Ota, Y.** Vitamin *A* content of the unsaponifiable matter of liver oils, 54.
- Meyer, H.** New derivatives of *p*-phenylenediamine and their value as hair-dyes, 675.
- Michaelis, L., and Yamaguchi, S.** Colorimetric method for the micro analysis of cobalt, 620.
- Middleton, E. L.** Silicosis in industry in Britain, 757.
- Middleton, G.** Purity of ether for analytical use, 45.
- Miermeister, A.** See Büttner, G., and Miermeister, A.
— See also Grossfeld, J., and Miermeister, A.
- Millet, H.** Excretion of lead in urine, 610.
- Mills, V. C.** See Englis, D. T., and Mills, V. C.
- Milae, G.** Cobaltinitrite volumetric method of determining potassium in soil extracts, 558.
- Minami, Y.** Analysis of Japanese allanite, 682.
- Mitchell, C.** See Germuth, F. G., and Mitchell, C.
- Mitchell, H. H.** Note on quantitative methods of measurement of the nutritive value of proteins, 47.
- Mitchell, L. C., and Alfred, S.** Iodine value of Spanish paprika oil, 44.
- Moore, C. N.** See Knudson, A., and Moore, C. N.
- Moore, T.** Vitamin *A* and carotene. I. Association of vitamin *A* activity with carotene in the carrot root, 765.
— See also Harris, L. J., and Moore, T.
- More, A.** Meniscus corrections involved in the calibration of graduated tubes, 630.
— Sterols in butter, 735.
- Morgan, A. F., and Field, A.** Effect of drying and of sulphur dioxide upon the antiscorbutic property of fruits, 483.
- Morgan, R. S., and MacLennan, K.** Fluorescence of some vitamin *A*-containing fats, 250.
- Morrell, R. S.** See Marks, S., and Morrell, R. S.
- Morris, V. N.** Determination of ethylene by absorption in a solution of silver nitrate, 487.
- Morse, F. W.** Mineral constituents of cranberries, 178.
- Morton, R. A.** See Drummond, J. C., and Morton, R. A.
— See also Duliere, W., Morton, R. A., and Drummond, J. C.
- Moser, L., and Brandl, O.** Gravimetric methods for vanadium, 368.
- Moser, L., and Brukl, A.** Analytical chemistry of gallium: Part I, 64; Part II, 367.
- Moser, L., and List, F.** Analytical chemistry of beryllium, Part II, 366.
- Moser, L., and Schutt, K.** Separation of lithium from potassium, sodium and magnesium, 370.
- Moss, J. E., and Knapp, A. W.** Measurement of the strength of sunlight, 334.
- Mottram, V. H.** See Clifford, W. M., and Mottram, V. H.
- Munch, J. C.** See McClosky, W. T., and Munch, J. C.
- Munch, J. C., and Gittinger, G. S.** Formula for calculating composition of mixtures of mydriatic alkaloids, 47.
- Musher, S., and Willoughby, C. E.** Use of ultraviolet light in the detection of refined oil in virgin olive oil, 672.
- N**
- Nametkin, S. S., and Nekrassow, N.** Reaction for primary arsines, 489.
- Nekrassow, W.** See Nametkin, S. S., and Nekrassow, W.
- Neller, J. R.** Accuracy of the Gutzeit method for arsenic, 618.
- Nelson, E. K.** Modification of the Fiehe test for the detection of invert sugar in honey, 603.
— Some organic acids of sugar cane molasses, 670.
- Nelson, P. M.** See House, M. C., Nelson, P. M., and Haber, E. S.
- Newcomb, C., and Sankaran, G.** Manganese in foodstuffs, 348.
- Newitt, D. M.** See Bone, W. A., Newitt, D. M., and Townene, D. T.
- Newton, E. B.** See Benedict, S. R., and Newton, E. B.
- Nicol, H.** See Drakeley, T. J., and Nicol, H.
- Nicholls, J. R.** Specific gravities and immersion refractometer readings of dilute mixtures of acetone and water, 9.
— The detection of the prohibited vegetable and coal tar colours in foodstuffs, 335.
— See also Adams, C. A., and Nicholls, J. R.
- Niederl, J. B., and Silbert, E. P.** Gravimetric method for the micro determination of molybdenum, 256.
- Niessner, M.** Separation of beryllium from aluminium, iron and copper by *o*-hydroxyquinoline, 434.
- Niethammer, A.** Detection of rancidity in fats from intact seeds and fruits, 548.
— Testing seeds, etc., under the quartz mercury vapour lamp, 563.
- Nightingale, E.** See Andersen, A., and Nightingale, E.
- Norman, A. G.** Chemical constitution of the gums. Part I. Nature of gum arabic and the biochemical classification of the gums, 549.
- Norris, E. R., and Danielson, I. S.** Comparison of biological and colorimetric assays for vitamin *A* as applied to fish oils, 612.
- Nottbohm, F. E., and Lucius, F.** Melecitose in linden dew honey, 670.
- O**
- Ochoa, S., and Valdecasas, J. G.** Micro method for the determination of total creatinine in muscle, 247.
- Ode, W. H.** See Schrenk, W. T., and Ode, W. H.
- Ogburn, S. C., and Riesmeyer, A. H.** Determination of palladium by 6-nitroquinoline, 63.
- Oka, S.** See Kameyama, N., and Oka, S.
- Okáč, A.** See Dubsky, J. V., and Okáč, A.
- Okoloff, F. S.** Colorimetric determination of ergot in flour, 352.
- Okoloff, F. S., and Akimoff, I. G.** Determination of ergot in flour by a serological method, 353.
- Oliveiro, C. J.** See Rosedale, J. L., and Oliveiro, C. J.

- Olsen, C.** Determination of ammonia in soil and the adsorption power of soil for ammonia, 676.
- Onslow, M. W.** Practical Plant Biochemistry (Review), 774.
- Orbán, G., and Stitz, J.** Fluorescence of honey in ultra-violet light, 240.
- Orthmann, A. C., and Arner, W. J.** The cold test for neatsfoot oil, 119.
- Osborn, A. S.** Questioned Documents, 2nd Ed. (Review), 501.
- Osborne, W. A.** Note on volatile sulphide from muscle, 51.
- Ota, Y.** See Meno, I. S., Yamashita, M., and Ota, Y.
- Owen, O.** Analysis of tomato plants, 558.

P

- Palkin, S., and Watkins, H. R.** Purification and preservation of ether for anaesthetic use, 756.
- Palmer, L. S.** See Kennedy, C., and Palmer, L. S.
- Pamfilov, A. V., and Kisseleva, V. E.** Lehmann's method for the determination of aniline, 60.
- Papadakis, P. E.** Invertase from honey, 669.
- Parker, A. J., and Spackman, L. S.** Investigations on the relations between the acidity and freezing point of milk, 217.
- Partridge, W.** The extractives of brandy, 154.
- Pascoe, T.** See Gregory, R., and Pascoe, T. A.
- Pauley, W. M.** See Henville, D., and Pauley, W. M.
- Peet, C. H.** Valuation of insecticides, 49.
- Penau, H., and Tanret, G.** Dextro-rotatory sterol of yeast. Zymosterol, 431.
- Pénau, M. H., and Hardy, Z.** Study of the digitonin ergosterol complex, 254.
- Péntcheff, N. P.** Quantitative determination of neon in natural gases, 617.
- Perquin, J. N. J.** See Waterman, H. I., Perquin, J. N. J., and van Westen, H. A.
- Peterson, W. H.** See Lindow, C. W., Elvehjem, C. A., and Peterson, W. H.
— See also Preuss, L. M., Peterson, W. H., and Fred, E. B.
- Petrovsky, A.** Rapid test for tungsten in ores, 490.
- Pfiffner, J. J.** See Rockwood, E. W., Turner, R. G., and Pfiffner, J. J.
- Picon, M.** See Fabre, R., and Picon, M.
- Pierce, H. B., and Kilborn, R. B.** Quantitative determination of indole in bacterial cultures, 251.
- Pierce, J. A.** Detection and determination of carbon disulphide in fluids, 768.
- Pilaar, W. M. M.** Determination of carbon monoxide in blood, 553.
- Pines, C. C.** See Leffmann, H., and Pines, C. C.
- Piney, A.** Recent Advances in Haematology (Review), 691.
- Plücker, W., and Bartels, W.** Determination of the number of organisms in water, 56.
- Pope, —.** See Kegel, McNally and Pope.
- Popesco, A.** See Jonescu-Matiu, A., and Popesco, A.
- Porter, C. H.** See Drew, H. D. K., and Porter, C. H.
- Porter, C. W.** Molecular Rearrangements (Review), 261.
- Posdeew, A.** See Glassmann, B., and Posdeew, A.
- Poucher, W. A.** Perfumes, Cosmetics and Soaps. Vol. II, 314.
- Preuss, L. M., Peterson, W. H., and Fred, E. B.** Gas production in the making of sauerkraut, 57.
- Prideaux, E. B. R.** Potentiometric titration of ammonia, 365.
- Priest, G. W.** Determination of neutral oil in sulphonated oils. Committee Report, 118.
- Pring, M. E., and Spencer, J. F.** Electrometric determination of copper. I. Müller and Rudolph's method, 509. II. Application of Volhard's method to electrometric analysis, 576.
- Pritzker, J., and Jungkunz, R.** Quantitative examination of the Kreis rancidity reaction, 547.
- Pryde, J.** The ABC of Vitamins, 314.
- Pucher, G. W.** See Vickery, H. B., and Pucher, G. W.

R

- Rae, J.** Salicyl-sulphonic acid, 551.
- Ragins, I. K.** Further application of the vanillin and hydrochloric acid reaction in the determination of tryptophane in proteins, 115.
- Raiford, L. C., and Hildebrand, J. G.** Cresyl esters of phenyl-acetic acid, 616.
- Ramage, H.** Spectrographic chemical analysis, 373.
- Ramsay, J.** See Holmes, H. N., Ramsay, J., and Elder, A. L.
- Ravenswaay, H. J.** See Ter Meulen, H., and Ravenswaay, H. J.
- Rawlins, L. M. C., and Schmidt, C. L. A.** Studies on the combination between certain basic dyes and proteins, 487.
- Reclaire, A.** See Hendriksz, R. D., and Reclaire, A.
- Reed, E. O.** See Frey, R. W., Leinbach, L. R., and Reed, E. O.
- Reed, R. D., and Withrow, J. R.** Detection of potassium in presence of ammonium salts, 65.
— Influence of lithium, rubidium, caesium and magnesium upon the detection of potassium by zirconium sulphate, 370.
— Zirconium. IV. Precipitation of zirconium by phosphates, 491.
- Reich-Rohrwig, W.** See Dworzak, R., and Reich-Rohrwig, W.
- Reid, E. E.** See Borgstrom, P., and Reid, E. E.
- Reif, G.** Luminescence of creatinine, 757.
- Reinshagen, E.** See Tillmans, J., Hirsch, P., and Reinshagen, E.
- Reinthal, F.** Artificial Silk (Review), 260.
- Reiss, E.** Die Refraktometrische Untersuchung der Milch (Review), 127.
- Reith, J. F.** Micro-titration of iodides, in absence or in presence of large proportions of nitrite, 371.

- Remington, R. E.** See McClendon, J. F., and Remington, R. E.
- Remington, R. E., Culp, F. B., and Von Kolnitz, H.** The potato as an index of iodine distribution, 760.
- Richard, A.** Reactions of soya bean oil, 241.
- Richardson, G. M., and Cannan, E. K.** Reaction of azine compounds with proteolytic enzymes, 761.
- Ridsdale, N. D.** The determination of sulphur by the evolution process in steels and cast iron, 166.
- Riesmeyer, A. H.** See Ogburn, S. C., and Riesmeyer, A. H.
- Riess, C.** Determination of insoluble matter in tanning extracts, 488.
- Rinse, J.** See Schoen, M. J., and Rinse, J.
- Robbins, B. H.** See Lamson, P. D., Robbins, B. H., and Ward, C. B.
- Roberts, J.** See Henderson, A., and Roberts, J.
- Robertson, A., and Robinson, R.** Characterisation of the anthocyanins and anthocyanidins by means of their colour reactions in alkaline solutions, 354.
- Robinson, G. W., McLean, W., and Williams, R.** Determination of organic carbon in soils, 360.
- Robinson, R.** The determination of small quantities of mercury in presence of organic and inorganic compounds, 145.
— See also Robertson, A., and Robinson, R.
- Rockwood, E. W., Turner, R. G., and Pfiffner, J. J.** A previously undetected constituent of blood, 610.
- Roe, J. H., and Kahn, B. S.** Colorimetric determination of blood calcium, 181.
- Roehm, R. R.** See Williams, R. J., McAlister, E. D., and Roehm, R. R.
- Rogers, J. S.** Fineness and available lime content of quicklimes, 190.
- Rolleston, Sir H.** Aspects of Age, Life and Disease, 130.
- Rooke, H. S.** See Lampitt, L. H., Hughes, E. B., and Rooke, H. S.
- Rosedale, J. L., and Oliveiro, C. J.** Antineuritic vitamin. II. Properties of the "curative" substance, 248.
- Rosenheim, O.** Specific colour reaction for ergosterol, 355.
- Rosenheim, O., and Webster, T. A.** Absorption spectrum of vitamin A, 764.
— Biological inertness of irradiated mycosterols other than ergosterol, 248.
- Rosenthaler, L.** Beta-anthraquinone-monosulphonic acid as a microchemical reagent for alkaloids, etc., 351.
— Japanese ginger, 751.
— Microchemical distinctions of essential oils, 362.
— Two South American cinchona barks, 753.
- Rothenfusser, S.** Detection and determination of sulphur dioxide, 770.
- Rudolfs, W., and Lackey, J. B.** Composition of water and mosquito breeding, 495.
- Ruigh, W. L.** Sensitive test for magnesium, 489.
- Russell, E.** Report of the Public Analyst for the City and County of Bristol for the year 1928, 591.
- Sabetay, S.** Identification of primary phenylethyl alcohol in essential oils and mixtures of perfumes, 615.
— Preparation of styrolenes. Detection and identification of β -phenylethyl alcohol, 253.
- Sadolin, E.** Normal occurrence of arsenic in fish and in cod-liver oil, 547.
- Sand, H. J. S.** New apparatus for electrolytic analysis, 275.
- Sandell, E. B.** See Kolthoff, I. M., and Sandell, E. B.
- Sankaran, G.** See Newcomb, C., and Sankaran, G.
- Sassaman, H. L.** See Bethke, R. M., Zinzalian, G., Kennard, D. C., and Sassaman, H. L.
- Saudek, R.** Experiments with Handwriting, 130.
- Schmidt, H.** New procedure for the separation of alcohols and phenols from oil mixtures, 57.
- Schmidt, C. L. A.** See Rawlins, L. M. C., and Schmidt, C. L. A.
- Schnellbach, W.** Water in strychnine sulphate, 672.
- Schoeller, W. R.** Investigations into the analytical chemistry of tantalum, niobium and their mineral associates. XV. A new method for the separation of tantalum and niobium from titanium and zirconium (I: Qualitative), 453.
- Schoeller, W. R., and Jahn, C.** Investigations into the analytical chemistry of tantalum, niobium and their mineral associates. XIV. A new method for the separation of small quantities of tantalum and niobium from titanium, 320.
- Schoeller, W. R., and Webb, H. W.** Investigations into the analytical chemistry of tantalum, niobium and their mineral associates. XVI. Observations on tartaric hydrolysis. XVII. Quantitative precipitation of the earth acids and certain other oxides from tartrate solution, 704.
- Schoen, M.** The Problem of Fermentation: The Facts and Hypotheses (Review), 440.
- Schoen, M. J., and Rinse, J.** Distinction of pigments in ultra-violet light, 684.
- Schoorl, N.** Caffeine-salicylic acid as a molecular compound, 550.
- Schrenk, W. T., and Ode, W. H.** Determination of silica in the presence of fluorspar, 771.
- Schutt, K.** See Moser, L., and Schutt, K.
- Schwaibold, J.** Determination of iodine (halogen) in organic matter, 185.
- Schwicker, A.** Iodimetric determination of thiocyanates, 493.
— Volumetric determinations by iodate, 493.
- Seidell, A.** Further progress towards the isolation of the antineuritic vitamin (vitamin B) from brewers' yeast, 482.
- Selivounoff, E.** Detection and determination of carbon disulphide in air, 488.
- Sen, K. B.** See Spencer, E., and Sen, K. B.
- Sequin, L.** See François, M., and Sequin, L.
- Sereque, A. F.** See Carpenter, T. M., Fox, E. L., and Sereque, A. F.

- Seyewetz, A.** Fluorescence of colouring matters in ultra-violet light, 309.
- Shaw, J. A.** Determination of phenols, 615.
- Sherman, H. C., and Stiebeling, H. K.** Quantitative studies of responses to different intakes of vitamin *D*, 674.
- Shrewsbury, H. S.** Instability of precipitin antisera in the tropics, 29.
- Silbert, E. P.** See Niederl, J. B., and Silbert, E. P.
- Sisley, P., and David, M.** Determination of nitrogen by the Kjeldahl method, applied to the analysis of colouring matters and intermediates, 434.
- Smith, F. D.** See Blicke, F. F., and Smith, F. D.
- Smith, W.** Determination of iodine in organic combinations, especially in thyroid gland, 45.
- Snoddy, A. O.** See Bosart, L. W., and Snoddy, A. O.
- Spackman, L. S.** See Parker, A. J., and Spackman, L. S.
- Spacu, G., and Dick, J.** Rapid microchemical determination of copper and mercury, 768.
- Spacu, G., and Suciú, G.** Rapid determination of mercury and cadmium, 618.
— Rapid microchemical determination of copper and mercury, 768.
- Speer, J. H., Wise, E. C., and Hart, M. C.** Composition of spinach fat, 423.
- Spencer, E., and Sen, K. B.** The use of mixed bromides in place of chlorides in the determination of alkalis, 224.
- Spencer, J. F.** See Pring, M. E., and Spencer, J. F.
- Spindler, L. A.** See Eckert, J. E., and Spindler, L. A.
- Spitzen, V.** Precipitation of tungsten as mercurous tungstate, 123.
- Sreenivasaya, M.** See Krishna, B. H. R., and Sreenivasaya, M.
- Staudinger, H.** Anleitung zur Organischen Qualitativen Analyse, 502.
- Steenbock, H.** See Elvehjem, C. A., Steenbock, H., and Hart, E. B.
— See also Waddell, J., Steenbock, H., Elvehjem, C. A., and Hart, E. B.
- Steenhauer, A. J.** See VanItalie, L., Steenhauer, A. J., and Harmsma, A.
- Steger, A., and Van Loon, J.** Thiocyanogen value of parsley seed oil, 177.
- Stephenson, J. E., and Bridge, S. W.** The action of air on flowers of sulphur and ground sulphur, 590, 737.
- Stirling, W. F.** Determination of hoof meal, 303.
- Sticht, G. A.** Rapid method for quinine determination, 607.
- Stiebeling, H. K.** See Sherman, H. C., and Stiebeling, H. K.
- Stitz, J.** See Orbán, G., and Stitz, J.
- Stokes, G. A.** Corrosion-resisting steel for laboratory use, 538.
- Stollenwerk, W., and Bäurle, A.** Simultaneous determination of orthophosphate and pyrophosphate, 435.
- Stoppel, A. E., and Harding, E. P.** Determination of the heat value of coal in nickel-lined bombs, 65.
- Stott, V.** Volumetric Glassware (Review), 497.
- Straub, J.** Difference in osmotic concentration between yolk and white of egg, 296.
- Stubbs, J. R.** See Elsdon, G. D., and Stubbs, J. R.
- Stutzer, H.** See Wassilieff, A., and Stutzer, H.
- Suciú, G.** See Spacu, G., and Suciú, G.
- Sullivan, J. T., and Horat, L. E.** Determination of small quantities of nitrogen in plant materials, 303.
- Suri, H. D.** See Dunningcliff, H. B., and Suri, H. D.
- Surie, E.** See Mellanby, E., Surie, E., and Harrison, D. C.
- Sutermeister, E.** Chemistry of Pulp and Paper-Making, 2nd Ed. (Review), 626.
- Švéda, J., and Uzel, R.** Determination of tin by rapid electrolysis, 366.
- Swift, E. H., and Hoeppe, R. W.** Volumetric determination of vanadium by means of potassium iodate, 491.
- Swoboda, K.** Determination of vanadium in steel, 122.
- Symons, C. T.** Report of the Government Analyst for Ceylon for the year 1928, 544.
- Szebellédy, L.** Detection of copper in presence of iron, 63.
— Determination of strontium and barium, 682.
- Szeberenyi, P.** Volumetric determination of sulphur in polysulphides, 621.

T

- Takata, R.** Vitamin *B* content of polished rice koji, 558.
- Tankard, A. R.** Annual Report of the Public Analyst and Bacteriologist for the City and County of Hull for 1928, 661.
- Tannenbaum, S. A.** Shakespeare Forgeries in the Revels Accounts (Review), 627.
- Tanner, F. W.** Bacteriology (Review), 688.
— Practical Bacteriology (Review), 375.
- Tanret, G.** See Penau, H., and Tanret, G.
- Tattersfield, F., and Hobson, R. P.** Determination of pyrethrin I and II in pyrethrum, 549.
— Insecticidal value and determination of pyrethrin I and II in *Pyrethrum cinerariaefolium*, 351.
- Täufel, K., and Bauschinger, C.** Composition of German rape oil, 187.
— Glycerides of rape oil, 187.
- Taylor, F. A., and Levene, P. A.** Oxidation of lignoceric acid, 113.
- Taylor, F. H. L.** See Young, A. G., and Taylor, F. H. L.
- Taylor, M.** Highly accurate method for the analysis of urea, 116.
- Ter Meulen, H., and Ravenswaay, H. J.** Determination of cadmium in organic and inorganic compounds, 190.
- Thienes, C. H.** Effect of nicotine upon white mice, 359.
- Thorne, P. C. L.** See Keane, C. A., and Thorne, P. C. L.

- Thrun, W. E.** See Winter, O. B., Thrun, W. E., and Bird, O. D.
- Thurman, B. H., and Crandall, W. R.** Film characteristics of the esters of the component fatty acids of linseed oil, 186.
- Tillmans, J.** New carbohydrate in rye flour and detection of rye flour in wheat and other flours, 43.
- Tillmans, J., Hirsch, P., and Reinshagen, E.** Use of 2,6-dichlorophenol indophenol as a reduction indicator in the examination of food-stuffs, 176.
- Timon-David, J.** Action of bromine on insect oils, 433.
- Tinkler, C. K., and Masters, H.** Applied Chemistry. Vol. I. Water, Detergents, Textiles, Fuels, etc., 2nd Ed. (Review), 311.
- Titus, R. W., and Hughes, J. S.** Storage of manganese and copper in the animal body and its influence on haemoglobin building, 609.
- Townend, D. T.** See Bone, W. A., Newitt, D. M., and Townend, D. T.
- Treadwell, W. D., and Eppenberger, W.** Loosely-bound sulphur in egg albumin, 114.
— Volumetric method for the determination of protein solutions, 114.
- Trevithick, H. P., and Lauro, M. F.** Solubility tests of castor oil, 297.
- Tsujimoto, M.** Crab liver oil, 44.
— Insect oils, 305.
- Turner, F. M.** See Atack, F. W., Elworthy, R. T., and Turner, F. M.
- Turner, R. G.** See Rockwood, E. W., Turner, R. G., and Pffner, J. J.
- U**
- Uzel, R.** See Švéda, J., and Uzel, R.
- V**
- Vaidya, B. K.** Action between copper salts and glycerol, 308.
- Valdecasas, J. G.** See Ochoa, S., and Valdecasas, J. G.
- Valdigué, A.** Action of Schiff's reagent on pyrimidone, 112.
- Van Arkel, C. G.** Nephelometric determination of pepsin, 762.
- Van der Slik, M., and Vermeulen, J.** Determination of the total geraniol content of citronella oil, 767.
- Van Druten, A.** Luminescence of a genuine Dutch lard in ultra-violet light, 347.
- Van Italie, E. I.** Thiocyanogen value of strophanthus oil and of oils of the chaulmoogra group, 606.
- Van Italie, L., Steenhauer, A. J., and Harmsma, A.** Analysis of spirit of nitre, 244.
- Van Loon, J.** See Steger, A., and Van Loon, J.
- Van Raalte, A.** Luminescence of oils and fats, 110.
— Separation of solid fats into their constituents, 605.
— The freezing point of milk, 266.
- Van Slyke, D. D., and Hiller, A.** Gasometric determination of methaemoglobin, 760.
- Van Stolk, D., Dureuil, E., and Heudebert.** Conditions of formation and destruction of vitamin D on the irradiation of ergosterol, 54.
- Van Urk, H. W.** New reactions of cantharidin, 425.
— Nitrobenzaldehyde as reagent for organic medicines, 424.
— Reaction for the ergot of rye alkaloids, ergotamine, ergotoxine and ergotinine. Examination and colorimetric determination of rye alkaloid preparations, 479.
— Universal indicator which gives the colours of the spectrum over a Ph range of 3 to 11.5, 254.
- Van Westen, H. A.** See Waterman, H. I., Bertram, S. H., and Van Westen, H. A.
— See also Waterman, H. I., Perquin, J. N. J., and van Westen, H. A.
- Verkade, P. E.** Calorimetric investigations. Benzoic acid as a standard for the standardisation of combustion calorimeters, 124.
- Vermeulen, J.** See Van der Slik, M., and Vermeulen, J.
- Vickery, H. B., and Leavenworth, C. S.** Separation of cystine from histidine, 677.
- Vickery, H. B., and Pucher, G. W.** Determination of ammonia and amide nitrogen in tobacco by the use of permutit, 550.
— Determination of "free nicotine" in tobacco. Apparent dissociation constants of nicotine, 754.
— Determination of nitrate nitrogen in tobacco, 608.
- Villavecchia, G. V.** Dizionario di Merceologia e di Chimica Applicata. Vol. I. 5th Ed., 502.
- Voisenet, E.** Divinylglycol as the cause of the bitter flavour of wines suffering from bitterness, 421.
- Von der Heide, C., and Hennig, K.** Detection of fruit wine in grape wine by means of dibenzal-sorbitol, 422.
- Von der Heide, C., and Mändlen, H.** Occurrence of sucrase in must and wine, 355.
- Von Kolnitz, H.** See Remington, R. E., Culp, F. B., and von Kolnitz, H.
- Von Loesecke, H.** Preparation of banana vinegar, 348.
— Quantitative changes in the chloroplast pigments in the peel of bananas during ripening, 611.
- Vorländer, D.** Menthone as a reagent for aldehydes, 485.
- W**
- Waddell, J., Steenbock, H., Elvehjem, C. A., and Hart, E. B.** Iron in nutrition. IX. Further proof that the anaemia produced on diets of whole milk and iron is due to a deficiency of copper, 556.

- Wagenaar, M.** Detection of castor beans in feeding stuffs, 560.
 — Microchemical reactions of homatropine, 47.
 — Microchemical reactions of physostigmine, 424.
 — Microchemical reactions of piperine, 424.
 — Microchemical reactions of theobromine, 244.
- Wakefield, E. G.** Colorimetric determination of total and inorganic sulphates in blood serum, urine and other body fluids, 300.
- Waldschmidt-Leitz, E.** Enzyme Actions and Properties, 502.
- Walker, J. C.** See Link, K. P., Angell, H. R., and Walker, J. C.
- Wallace, J. H.** See Furman, N. H., and Wallace, J. H.
- Walter, E.** See Braun, K., and Walter, E.
- Walton, S. G.** See Cooksey, T., and Walton, S. G.
- Ward, A. M.** See Dorrington, B. J. F., and Ward, A. M.
- See also Kny-Jones, F. G., and Ward, A. M.
- Ward, C. B.** See Lamson, P. D., Robbins, B. H., and Ward, C. B.
- Wardlaw, W.** Qualitative Analysis, 130.
- Ware, A. H.** Tests for phenols involving the use of hydrogen peroxide, 561.
 — Use of aldehydes and di-hydroxy acetone in the detection and differentiation of phenols, 614.
 — Use of iron reagents in the detection and differentiation of phenols, 58.
- Ware, J. C.** Essentials of Qualitative Chemical Analysis (Review), 438.
- Warren, L. E.** Assay of jalap, 608.
- Wassilief, A., and Stutzer, H.** Permanganate titration of antimony in white metal, 620.
- Waterman, H. I., Bertram, S. H., and Van Westen, H. A.** Application of the hydrogen value to unsaturated fatty acids, 252.
- Waterman, H. I., Perquin, J. N. J., and Van Westen, H. A.** Determination of the hydrogen value of unsaturated compounds, 119.
- Watkins, H. R.** See Palkin, S., and Watkins, H. R.
- Watson, C., Finlay, T. Y., and King, J. B.** Therapeutic value of irradiated milk in the treatment of rickets, 673.
- Watson, H. E.** See Joglekar, R. B., and Watson, H. E.
- Webb, H. W.** See Schoeller, W. R., and Webb, H. W.
- Webster, T. A.** See Rosenheim, O., and Webster, T. A.
- Webster, T. A., and Bourdillon, R. B.** Irradiation of ergosterol, 52.
- Weinstein, P.** Tests for the degree of heating of milk, 237.
- Weiss, F.** Examination of lard in ultra-violet light, 178.
- Wentzel, H.** Practical siphon, 125.
- Werder, J.** Detection of apple and other fruit juices in wine, 476.
- West, C. J.** Annual Survey of American Chemistry, 130.
- Wijs, J. J. A.** The Wijs method as the standard for iodine absorption, 12.
- Willard, H. H., and Young, P.** Ceric sulphate as an oxidising agent. VIII. Determination of chromium, 190.
- Williams, R.** See Robinson, G. W., McLean, W., and Robinson, R.
- Williams, R. J., McAlister, E. D., and Roehm, R. R.** Rapid and accurate method for determination of the quantity of yeast or other micro-organisms in a suspension, 613.
- Willoughby, C. E.** See Musher, S., and Willoughby, C. E.
- Windisch, W., Kolbach, P., and Winter, M.** Analysis of the bitter substances of hops, 422.
- Winter, M.** See Windisch, W., Kolbach, P., and Winter, M.
- Winter, O. B., and Bird, O. D.** Determination of aluminium in plant materials, 751.
- Winter, O. B., Thrun, W. E., and Bird, O. D.** Study of the use of aurintricarboxylic acid for the colorimetric determination of aluminium, 680.
- Wise, E. C.** See Speer, J. H., Wise, E. C., and Hart, M. C.
- Withrow, J. R.** See Reed, R. D., and Withrow, J. R.
- Wohnlich, E.** See Gronover, A., and Wohnlich, E.
- Wokes, F.** Standardisation of tincture of digitalis, 426.
- Wolesensky, E.** Determination of sulphur in rubber by the perchloric acid method, 61.
- Wolf, H., and Heilingötter, R.** Volumetric determination of tin, 680.
- Wolff, W. A.** See Balls, A. K., and Wolff, W. A.
- Wood, D. R.** Report of the County Analyst and Bacteriologist for the County of Somerset for 1928, 231.
- Woodroffe, D.** Determination of fat in leather, 188.
- Woodward, G.** Volumetric determination of sulphur in crude petroleum, 616.

Y

- Yamaguchi, S.** See Michaelis, L., and Yamaguchi, S.
- Yamamoto, K.** See Kobayashi, K., and Yamamoto, K.
- Yamashita, M.** See Meno, I. S., Yamashita, M., and Ota, Y.
- Yoe, J. H.** Photometric Chemical Analysis. Vol. I. Colorimetry (Review), 193; Vol. II. Nephelometry, 314.
- Yoe, J. H., and Kleinmann, H.** Photometric Chemical Analysis. Vol. II. Nephelometry (Review), 564.
- Young, A. G., and Taylor, F. H. L.** Electrolytic method for the determination of small amounts of mercury in body fluids and tissues, 759.

Young, C. H. Transmission of ultra-violet light through tracing cloth, 191.

Young, P. *See* Willard, H. H., and Young, P.

Younkins, J. A. *See* Davis, J. D., and Younkins, J. A.

Youse, L. K. *See* Lange, N. A., Ebert, H. L., and Youse, L. K.

Z

Zwikker, J. J. L. An impurity in commercial narceine which gives a colour reaction with sodium nitroprusside, 425.

Zinzalian, G. *See* Bethke, R. M., Zinzalian, G., Kennard, D. C., and Sassaman, H. L.

INDEX TO SUBJECTS.

A

- Absorption** spectra and fluorescence of fats. H. P. Kaufmann, 309.
spectrum of vitamin A. O. Rosenheim and T. A. Webster, 764.
- Accrington**: Appointment of Public Analyst for Borough of —. 285.
- Accumulators**: Alkaline —. J. T. Crennell and F. M. Lea, 130.
- Acetaldehyde**: Menthone as reagent for —. 486.
- Acetone**: Analysis of mixtures containing ethyl alcohol, isopropyl alcohol and —. C. A. Adams and J. R. Nicholls, 2.
as a control substance for respiration and gas analysis apparatus. T. M. Carpenter, E. L. Fox, and A. F. Sereque, 427.
Oxidation of —. 7.
Penzoldt test for qualitative detection of —. 5.
Specific gravities and immersion refractometer readings of dilute mixtures of water and —. J. R. Nicholls, 9.
Specific gravities and refractions of aqueous mixtures of — and the lower alcohols, 3.
- Acid Clay**: Benzidine colour reaction of Japanese —. N. Kameyama and S. Oka, 562.
Genesis of Japanese —. K. Kobayashi and K. Yamamoto, 562.
Synthesis of Japanese —. N. Kameyama and S. Oka, 65.
Synthetic Japanese —. N. Kameyama and S. Oka, 62.
- Acidity** of milk; Investigations on the relations between the freezing point and —. A. J. Parker and L. S. Spackman, 217.
- Acrolein**: Menthone as reagent for —. 486.
- Actinium**: Atomic weight of —. 296.
- Adulteration** in butter; Dyes as an indication of —. D. Henville and W. M. Paulley, 413.
- Aerated** solutions; Effect of boron deficiency on the growth of tobacco plants in un-aerated and —. J. E. McMurtrey, 427.
- Age**: Aspects of —, Life and Disease. Sir H. Rolleston, 130.
- Agra and Oudh**: *See* **United Provinces**.
- Agricultural** analysis; Abstracts: 184, 303, 360, 485, 558, 676.
Analysts; Official appointment of —. 536.
Experiment Station, Connecticut. Report on Food Products and Drug Products for 1927, 160.
Produce (Grading and Marking) (Eggs) Regulations, 1928, 172.
- Agriculture**: Ministry of —. *See* **Ministry of Agriculture and Fisheries**.
U.S.A. Dept. of —. Certification of coal-tar food colours. The permitted dyes. 345.
U.S.A. Dept. of —. Standard for mayonnaise salad dressing. 107.
- Air**: Action of — on flowers of sulphur and ground sulphur. J. E. Stephenson and S. W. Bridge, 590.
carbon disulphide in —; Detection and determination of. E. Selivounoff, 488.
flow of —; Recent devices for measuring R. A. H. Flugge-de-Smid, 126.
ozone in —; New method for quantitative determination of. M. S. Egorow, 189.
- Air Ministry**. *See* **Meteorological Office**.
- Albumin**: Loosely-bound sulphur in egg —. W. D. Treadwell and W. Eppenberger, 114.
- Albuminous** compounds from the meat of different animals. K. Beck and E. Casper, 238.
- Alcohol**: Ethyl —. *See* **Ethyl Alcohol**.
in the human subject; Determination of small amounts of —. J. Evans and A. O. Jones, 134.
Isopropyl —. *See* **Isopropyl Alcohol**.
- Alcoholic** beverages; Detection and determination of lauric acid in —. J. Grossfeld and A. Miermeister, 108.
- Alcoholic Potash Reagent** for saponification; A more stable —. D. T. Englis and V. C. Mills, 493.
- Alcohols**: separation of phenols and — from oil mixtures; New procedure for. H. Schmidt, 57.
Specific gravities and refractions of aqueous mixtures of acetone and the lower —. 3.
- Aldehydes**: Menthone as a reagent for —. D. Vorländer, 485.
New oxidation reactions of —. J. B. Conant and J. G. Aston, 57.
Use of — in detecting and differentiating phenols. A. H. Ware, 614.
- Alkaline** accumulators. J. T. Crennell and F. M. Lea, 130.
copper solution; Observations upon Benedict's —. (Determination of sugar in blood). M. R. Everett, 430.
copper solutions; Determination of reducing sugars, particularly of glucose, by — in the presence of hydrocyanic acid. H. Herissey and A. Chalmers, 421.
solutions; Characterisation of the anthocyanins and anthocyanidins by means of their colour reactions in —. A. Robertson and R. Robinson, 354.

- Alkalis:** Use of mixed bromides in place of chlorides in determining —. E. Spencer and K. B. Sen, 224.
- Alkaloid:** rye — preparations; Examination and colorimetric determination of. H. W. Van Urk, 479.
test for tannins. C. M. Fear, 316.
- Alkaloids:** Beta-anthraquinone-monosulphonic acid as a microchemical reagent for —. L. Rosenthaler, 351.
ergot of rye —; Reaction for the. H. W. Van Urk, 479.
mydriatic —; Formula for calculating composition of mixtures of. J. C. Munch and G. S. Gittinger, 47.
- Allanite:** Analysis of Japanese —. Y. Minami, 682.
- Allantoic Acid:** Enzymic conversion of uric acid into —. R. Fosse, A. Brunel and R. de Graeve, 557.
- Allantoin** in presence of urea; Biochemical determination of —. R. Fosse, A. Brunel and P. de Graeve, 479; in urine, 479.
- Alloy steel;** Determination of arsenic in —. 528.
- Alloys:** cobalt in —; Determination of. O. Heim, 464.
- Almond Oil:** Halogen absorption of —. 446.
- Almonds:** Boron compounds in Californian —. 18.
- Aluminium:** Atomic weight of —. 295.
Confirmatory test for —. R. Gemmill, R. Brackett and C. R. McCrosky, 366.
in plant materials; Determination of —. O. B. Winter and O. D. Bird, 751.
in steel; Determination of —. A. T. Etheridge, 141.
Separation of — by 8-hydroxyquinoline. G. E. F. Lundell and H. B. Knowles, 770.
Separation of beryllium from — by *o*-hydroxyquinoline. M. Niessner, 434.
Separation of gallium from —. 367.
Study of the use of aurintricarboxylic acid for the colorimetric determination of —. O. B. Winter, W. E. Thrun and O. D. Bird, 680.
- Amber:** Ultraviolet-detector as an aid in distinguishing real — from its imitations. G. Kostka, 256.
- America:** United States of —. *See* **United States of America.**
- American cheese,** 161.
Chemistry; Annual Survey of —. Vol. III. C. J. West, 130.
reindeer fat. W. F. Baughman, G. S. Jamieson and R. S. McKinney, 605.
safflower oil. G. S. Jamieson and S. I. Gertler, 347.
Soap-Maker's Guide. (Review), I. V. S. Stanislaus and P. B. Meerbott, 378.
- Amide Nitrogen** in tobacco; Determination of ammonia and — by use of permutit. H. B. Vickery and G. W. Pucher, 550.
of blood; Quantitative determination of —. S. Bliss, 180.
- Ammonia** in soil; Determination of — and the adsorption power of soil for —. C. Olsen, 676.
in tobacco; Determination of amide nitrogen and — by the use of permutit. H. B. Vickery and G. W. Pucher, 550.
Potentiometric titration of —. E. B. R. Prideaux, 365.
- Ammoniated Tincture of Quinine:** 540. (Legal Notes), 418.
- Ammonium** salts; Detection of potassium in presence of —. R. D. Reed and J. R. Withrow, 65.
- Ammonium Ion:** Reagent for —. T. G. Y. Arnal, 369.
- Ammonium Molybdate** method for detection and determination of sucrose. N. W. Matthews, 43.
- Amylase** test for the degree of heating of milk, 238.
- Anaemia** produced on diets of whole milk and iron proved to be due to deficiency of copper. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
- Anaesthetic ether;** Preservation of —. C. L. Hewer, 352.
Purification and preservation of ether as an —. S. Palkin and H. R. Watkins, 756.
- Analysis:** Chemical —. *See* **Chemical Analysis.**
electrolytic —; New apparatus for. H. J. S. Sand, 275.
Inorganic —. *See* **Inorganic Analysis.**
Organic —. *See* **Organic Analysis.**
Qualitative —. *See* **Qualitative Analysis.**
Quantitative —. *See* **Quantitative Analysis.**
Spectrographic chemical —. H. Ramage, 373.
Volumetric —. *See* **Volumetric Analysis.**
- Analytical Chemistry.** Vol. II. Quantitative. (Review), W. T. Hall, 258.
Methods; Standing Committee on Uniformity of —. Essential Oil Sub-Committee, 335.
- Aniline** dyes in paints, 748.
Lehmann's method for determining. A. V. Pamfilov and V. E. Kisseleva, 60.
poisoning in industry, 745.
- Animal** body; Storage of manganese and copper in the — and its influence on haemoglobin building. R. W. Titus and J. S. Hughes, 609.
fibres; Protection of — against clothes moths and dermestid beetles. C. O. Clarke, 126.
foods; Copper content of plant and animal —. C. W. Lindow, C. A. Elvehjem and W. H. Peterson, 420.
oils; Marine —. Oil of *Centrophorus Granulosus*. E. André and H. Canal, 606.
- p*-Anisaldehyde:** Menthone as reagent for —. 486.
- Anise Oil:** Microchemical distinction of —. 363.
- Anthocyanidins:** Characterisation of the anthocyanins and — by means of their colour reactions in alkaline solutions. A. Robertson and R. Robinson, 354.

- Anthocyanins:** Characterisation of the anthocyanidins and — by means of their colour reactions in alkaline solutions. A. Robertson and R. Robinson, 354.
- Anthrax:** Cases of — occurring in industry. 745.
- Anti-Beri-Beri Vitamin:** Improvements in the method of isolating the —. B. C. P. Jansen, 613.
- Anti-Diuretic** activity of commercial samples of pituitary extract; Comparison of the oxytocic, pressor and —. U. G. Bijlsma, J. H. Burn and J. H. Gaddum, 298.
- Antimony:** Application of the thiocyanate method for precipitating copper to the confirmatory tests for cadmium and —. A. F. Daggett, 679.
- Atomic weight of —. 295.
- Differentiation of tin and —. The phosphoric ion as a sensitive reagent. T. G. Y. Arnal, 256.
- films; Solubility of Reinsch — in water. S. G. Clarke, 99.
- in copper and its alloys; Determination of traces of —. S. G. Clarke and B. S. Evans, 23.
- in high-antimony copper alloys; Determination of — by means of sodium hydro-sulphite, 396.
- in lead and lead alloys; Determination of — by means of sodium hydrosulphite. 398.
- in white metal; Permanganate titration of —. A. Wassilieff and H. Stutzer, 620.
- Preparation of arsenious oxide free from —, and determination of minute amounts of — in arsenious oxide. C. W. Foulk and P. G. Horton, 619.
- Separation of cadmium from — by means of sodium hydrosulphite. 400.
- Separation of — from beryllium. 367.
- Solubility of — in water. J. Grant, 227.
- Antimony Trichloride** colour test for vitamin A. N. Evers, 612.
- Antineuritic** vitamin B from brewers' yeast; Further progress towards the isolation of —. A. Seidell, 482.
- vitamin B in beef and pork. R. Hoagland, 432.
- vitamin. II. Properties of the "curative" substance. J. L. Rosedale and C. J. Oliveiro, 248.
- Antirachitic** potency of ergosterol irradiated by ultra-violet light and by exposure to cathode rays; Comparison of —. A. Knudson and C. N. Moore, 183.
- properties of cod-liver meals. R. M. Bethke, G. Zinzalian, D. C. Kennard, and H. L. Sassaman, 182.
- substances. VIII. Studies on highly purified ergosterol and its esters. C. E. Bills and E. M. Honeywell, 53.
- vitamin in different samples of cod-liver oil, milk and butter; Variations in amounts of —. K. H. Coward, 302.
- Antiscorbic** property of fruits; Effect of drying and of sulphur dioxide upon the —. A. F. Morgan and A. Field, 483.
- Anti-Sera** for precipitin tests; Instability of — in the tropics. H. S. Shrewsbury, 29.
- A.O.A.C. Method** for determining sulphurous acid in food products; Comparison of the Monier-Williams and —. J. Fitelson, 297.
- Apiol:** Identification of —. J. King, 567.
- Apparatus:** Abstracts: 65, 124, 191, 256, 309, 372, 493, 563, 622, 684, 771.
- Apple** juice in wine; Detection of —. J. Werder, 476.
- Apples:** Boron compounds in dried —. 16.
- Keeping properties of —. 35.
- Marking of fresh — under the Merchandise Marks Act, 1928. 168.
- Sampling — in the orchard for the determination of arsenical spray residue. J. W. Barnes, 347.
- Applied Chemistry:** Annual Reports of the Society of Chemical Industry on the Progress of — for 1928. (Review), 772.
- Catalytic Processes in —. T. P. Hilditch, 314.
- Water, Detergents, Textiles, Fuels, etc. Vol. I. (Review), C. K. Tinkler and H. Masters, 311.
- Appointments:** Official —. 285, 332, 411, 536, 657, 735.
- Apricots:** Boron compounds in dried —. 16.
- Arachidonic Acid:** Preparation of —. J. B. Brown, 113.
- Arachis Oil:** Halogen absorption of —. 447.
- Argon:** Atomic weight of —. 295.
- Arrowroot:** Manganese in —. 348.
- Arsenate of Lead:** Poisoning by —. 599.
- Arsenic:** Accuracy of the Gutzeit method for —. J. R. Neller, 618.
- Atomic weight of —. 295.
- Detection of —. Dauvé, 56.
- Gutzeit test for —; Production of uniform stains in the. C. H. Manley, 30.
- in a body in a fatal case of poisoning by hydrosulphite arsenide; Distribution of —. F. J. T. Grigg, 659.
- in copper; Determination of —. 525.
- in fish and in cod-liver oil. E. Sadolin, 547.
- separation and determination of —; Method for. B. S. Evans, 523.
- Separation of — from beryllium. 367.
- test of the German Pharmacopoeia. G. Frerichs, 56.
- Arsenical** copper; Determination of traces of antimony in —. 26.
- poisoning in industry. 745.
- spray residue: Sampling apples in the orchard for the determination of —. J. W. Barnes, 347.
- Arsenious Oxide:** Preparation of antimony-free — and determination of minute amounts of antimony in —. C. W. Foulk and P. G. Horton, 619.
- Arsines:** Reaction for primary —. S. S. Nametkin and W. Nekrassow, 489.
- Asbestos:** Application of X-rays in the classification of fibrous silicate minerals commonly termed —. H. V. Anderson and G. L. Clark, 771.

- Asparagus**: Vitamin *A* content of —. J. W. Crist and M. Dye, 300.
- Atmospheric Nitrogen**; Fixation of —. (Review), F. A. Ernst, 195.
- Atomic weights**; Revised table of — for 1929, 294.
- Atropine**: Identification of — by means of Wagner's reagent. C. C. Fulton, 608.
- Aurintricarboxylic Acid**: Study of the use of — for the colorimetric determination of aluminium. O. B. Winter, W. E. Thrun and O. D. Bird, 680.
- Azine Compounds**: Reaction of — with proteolytic enzymes. G. M. Richardson and R. K. Cannan, 761.
- B**
- Bacillus Paratyphosus B**: Isolation of — from sewage. J. D. A. Gray, 184.
- Bacillus Tetani** in canned peas; Occurrence of —. F. Marsh and J. Henderson, 536.
- Bacillus Typhosus**: Viability of —. 291.
- Bacon**: Transport of frozen —. 35.
- Bacterial cultures**; Quantitative determination of indole in —. H. B. Pierce and R. B. Kilborn, 251.
- Bactericidal action** of the nitroso compounds. E. A. Cooper and R. B. Haines, 357.
- Bacteriological analysis**; Abstracts: 56, 184, 251, 357, 484, 613.
examination of shellfish, 159.
tests for graded milk. Ministry of Health Report. 235.
- Bacteriology**: Dairy —. (Review), B. W. Hammer, 442.
Practical —. (Review), F. W. Tanner, 375.
(Review), F. W. Tanner, 688.
- Banana vinegar**: Preparation of —. H. Von Loesecke, 348.
- Bananas**: Quantitative changes in the chloroplast pigments in the peel of — during ripening. H. von Loesecke, 611.
- Bank Notes**: Charred —. 289.
- Barium**: Atomic weight of —. 295.
Determination of strontium and —. L. Szebellédy, 682.
Separation of beryllium from —. 367.
- Barium Salts**: Conversion of higher fatty acids into their —. H. H. Escher, 252.
- Barium Sulphate** as indicator of the efficiency of sulphuric acid in drying apparatus. G. Boehm, 373.
- Barley**: Manganese in —. 348.
Pearl —. 468.
- Bayley's Chemists' Pocket Book**. 9th Ed. (Review), R. Ensoll, 495.
- Beef**: Antineuritic and water-soluble *B* vitamins in pork and —. R. Hoagland, 432.
suet; Shredded —. 539.
Transport of chilled —. 35.
- Vital organs** of —. Distribution of unsaturated fatty acids in tissues. W. R. Bloor, 112.
- Beetles**: Protection of animal fibres against clothes moths and dermestid —. C. O. Clarke, 126.
- Belgian Congo**: Palm oil from —. G. S. Jamieson and R. S. McKinney, 476.
- Benedict's** alkaline copper solution; Observations upon —. (Determination of sugar in blood.) M. R. Everett, 430.
- Benzaldehyde**: Menthone as reagent for —. 486.
- Benzene** poisoning. 600.
- Benzidine** colour reaction of Japanese acid clay. N. Kameyama and S. Oka, 562.
- Benzoic Acid** as a standard for the standardisation of combustion calorimeters. P. E. Verkade, 124.
- Benzoin**: Compound tincture of —. T. T. Cocking, 46.
- Bergeim's Method** for determining the digestibility of protein. W. D. Gallup, 247.
- Beri-Beri** and rice "toxin." 291.
- Beryllium**: Analytical chemistry of —. Part II. L. Moser and F. List, 366.
Atomic weight of —. 295.
in rocks; Determination of small quantities of —. B. E. Dixon, 268.
Separation of — from aluminium, iron and copper by *o*-hydroxyquinoline. M. Niessner, 434.
Separation of titanium from —. 269.
- Berzelius** method of determining alkalis modified. 225.
- Beta-Anthraquinone-Monosulphonic Acid** as a microchemical reagent for alkaloids, etc. L. Rosenthaler, 351.
- Betel Nut**: Manganese in —. 348.
- Bile Acids** determined quantitatively by means of a new colour reaction and mono-chromatic light. R. Gregory and T. A. Pascoe, 554.
- Biochemical** abstracts: 47, 112, 179, 245, 298, 353, 427, 479, 553, 609, 673, 757.
classification of the gums. A. G. Norman, 549.
determination of allantoin in the presence of urea. R. Fosse, A. Brunel and P. de Graeve, 479; in urine, 479.
- Biochemistry** of dry-rot in wood. E. C. Barton-Wright and J. G. Boswell, 358.
Practical Plant —. (Review), M. W. Onslow, 774.
Textbook of —. A. T. Cameron, 692.
- Biological** assays; Comparison of colorimetric and — for vitamin *A* as applied to fish oils. E. R. Norris and I. S. Danielson, 612.
inertness of irradiated mycosterols other than ergosterol. O. Rosenheim and T. A. Webster, 248.
materials; Determination of copper in —. C. A. Elvehjem and C. W. Lindow, 245.
materials; Determination of small quantities of lead, with special reference to urine and —. A. G. Francis, C. O. Harvey and J. L. Buchan, 725.
- Biologischen** Arbeitsmethoden; Handbuch der —. E. Abderhalden. Sect. IV. Refraktometrische Untersuchung der Milch. (Review), E. Reiss, 127.

- Biology: Colloid Chemistry.** Vol. II. Medicine and ——. (Review), Ed. by J. Alexander, 263.
- Birmingham:** Appointment of Public Analyst for City of ——. 285.
Average composition of milk in City of ——. 467.
Report of the City Analyst for —— for the Third Quarter of 1928. J. F. Liverseege, 31; for the Fourth Quarter of 1928, 155; Annual Report for 1928, 414; for the First Quarter of 1929, 539.
- Bismuth:** Atomic weight of ——. 296.
Determination of ——. G. J. Hough, 308.
Distribution of —— in the organs after injection of aqueous solutions. R. Fabre and M. Picon, 252.
Electrolytic separation of lead and —— with controlled potential. E. A. Collin, 654.
in tin-zinc alloys; Determination of —— by means of sodium hydrosulphite, 397.
New method for separating lead and ——. Frick and Engemann, 617.
Separation of cadmium from —— by means of sodium hydrosulphite. 400.
Separation of lead and ——. H. Blumenthal, 679.
Toxicological study of ——. R. Fabre and M. Picon, 55.
- Bismuth Carbonate:** nitrates in ——. Determination of. G. J. W. Ferrey, 756.
- Bitter Almond Oil:** Microchemical distinction of ——. 363.
- Bitter Substances** of hops; Analysis of ——. W. Windisch, P. Kolbach and M. Winter, 422.
- Bittersweet:** Poisoning by ——. H. Lowe, 153.
- Bituminous** coal; Electrostatic method of determining fusain in ——. J. D. Davis and J. A. Younkens, 616.
- Black Currants:** Boron compounds in ——. 17.
- Blood:** alcohol in ——. Determination of. 134.
amide nitrogen of ——. Quantitative determination of. S. Bliss, 180.
A previously undetected constituent of ——. E. W. Rockwood, R. G. Turner and J. J. Piffner, 619.
calcium; Colorimetric determination of ——. J. H. Roe and B. S. Kahn, 181.
carbon monoxide in ——. Determination of. W. M. M. Pilaar, 553.
copper in ——. Distribution of. C. A. Elvehjem, H. Steenbock and E. B. Hart, 555.
laevulose in ——. Colorimetric method for determining. R. C. Corley, 180.
lipoidal phosphorus in ——. Colorimetric method for determining. S. L. Leiboff, 50.
Micro time method for determining reducing sugars, and its application to the analysis of urine and ——. J. A. Hawkins, 750.
Piperazine for use in analysing ——. R. Gros, 49.
proteins; Use of molybdc acid as a precipitant for ——. S. R. Benedict and E. B. Newton, 428.
- Blood—continued.**
serum; Colorimetric determination of total and inorganic sulphates in ——. E. G. Wakefield, 300.
sugar in ——. Determination of. I. Observations upon Benedict's alkaline copper solution. M. R. Everett, 430.
sugar; Note on the new ferricyanide method for ——. O. Folin, 246.
tests in connection with drowning, 599.
Urobilin content of normal human ——. M. A. Blankenhorn, 116.
- Body fluids** and tissues; Electrolytic method of determining small amounts of mercury in ——. A. G. Young and F. H. L. Taylor, 759.
fluids; Colorimetric determination of total and inorganic sulphates in blood serum, urine and other ——. E. G. Wakefield, 300.
- Bolton:** Average composition of milk in County Borough of ——. 467.
- Bombs:** heat value of coal in nickel-lined ——. Determination of. A. E. Stoppel and E. P. Harding, 65.
- Bondon** cheese. 661.
- Bookbinding** leathers; English ——. R. W. Frey, L. R. Leinbach and E. O. Reed, 364.
- Borates:** New test for boric acid and ——. A. S. Dodd, 282.
- Borax** honey deficient in borax, 31.
- Boric Acid:** Confirmatory test for ——. 19.
in fruits and vegetable products; Natural occurrence of ——. 15.
in milk. 649.
in oranges. J. T. Dunn and H. C. L. Bloxam, 28.
New test for borates and ——. A. S. Dodd, 282.
sold as food preservative. (Legal Notes), 106.
- Borneo:** Fruits and seeds of *Hydnocarpus Woodii* from North ——. 347.
- Boron:** Atomic weight of ——. 295.
compounds in food and drugs; Study of the methods of determining ——. A. S. Dodd, 645; Part II. Experimental effect of fats and other organic substances on the determination. A. S. Dodd, 715.
compounds in fruits and vegetable products; Natural occurrence of ——. A. S. Dodd, 15.
deficiency; Effect of —— on the growth of tobacco plants in aerated and unaerated solutions. J. E. McMurtrey, 427.
Importance of —— in plant growth. E. S. Johnston, 48.
- Bran:** Rice husks in sharps and ——. A. J. Amos, 332.
- Brandy:** Extractives of ——. W. Partridge, 153.
- Brass:** antimony in ——. Determination of traces of, 27.
- Brazilian** oil seed; Castanha de Arara nuts: a new ——. 177.
- Bread:** Unleavened ——. 161.
- Bristol:** Report of the Public Analyst for the City and County of —— for the year 1928. E. Russell, 591

- British wine**; Non-alcoholic ——. 591.
- Bromides**: Use of mixed — in place of chlorides in determining alkalis. E. Spencer and K. B. Sen, 224.
- Bromine**: Action of — on insect oils. J. Timon-David, 433.
Atomic weight of ——. 295.
- Bronze**: antimony in —; Determination of traces of. 26.
arsenic in —; Determination of. 526.
- Buckingham**: Official appointment of Additional Public Analyst for County of ——. 536.
- Bullot Process** for preserving meat; Investigation of the ——. 601.
- Buns**: Cream ——. 740.
- Butter**: adulteration in —; Dyes as an indication of. D. Henville and W. M. Paulley, 413.
American standard for ——. 162.
antirachitic vitamin in different samples of cod-liver oil, milk and —; Variations in amounts of. K. H. Coward, 302.
Composition of Irish winter ——. P. Arup, 634.
cream sandwiches; Labelling of ——. (Legal Notes), 288.
fat; Studies in milk secretion based on the variations and yields of milk and — produced at morning and evening milkings. S. Bartlett, 179.
salt in margarine and —; Routine determination of. P. Arup, 658.
samples; Fall in Reichert-Meissl values on keeping ——. P. Arup, 736.
Sterols in ——. A. More, 735.
vitamin *A* in —; Test for. A. Andersen and E. Nightingale, 481.
- Butters**: Fatty acids and component glycerides of some New Zealand ——. T. P. Hilditch and E. E. Jones, 75, 152.
- C**
- Cabbage leaves**; Isolation of mesaconic acid from ——. H. W. Buston, 239.
Manganese in ——. 348.
Lead arsenate in ——. 747.
- Cacao butter**; Component glycerides of ——. C. H. Lea, 242.
butter; Distinction between pressed and extracted ——. Aufrecht, 346.
butter; The Kreis reaction as a method for detecting incipient rancidity in ——. T. H. Cooke, 411.
- Cadmium**: Application of the thiocyanate method for precipitating copper to the confirmatory tests for antimony and ——. A. F. Daggett, 679.
Atomic weight of ——. 295.
in organic and inorganic compounds; Determination of ——. H. ter Meulen and H. J. Ravenswaay, 190.
Rapid determination of mercury and ——. G. Spacu and G. Suci, 618.
- Cadmium—continued.**
Separation of — from antimony by means of sodium hydrosulphite. 402.
Separation of — from bismuth and lead by means of sodium hydrosulphite. 400.
Separation of beryllium from ——. 367.
- Caesium**: Atomic weight of ——. 295.
Influence of — upon the detection of potassium by zirconium sulphate. R. D. Reed and J. R. Withrow, 370.
- Caesium Ion**: Reagent for ——. T. G. Y. Arnal, 369.
- Caffeine-free coffee.** (Legal Notes), 469.
in tea; Determination of ——. S. Gobert, 110.
- Caffeine-Salicylic Acid** as a molecular compound. N. Schoorl, 550.
- Cajaput Oil**: Microchemical distinction of ——. 363.
- Cakes**: cream —; Definition of, 468.
- Calcium**: Atomic weight of ——. 295.
blood —; Colorimetric determination of. J. H. Roe and B. S. Kahn, 181.
content of milk; Effect of heat on ——. E. C. B. Mattick and H. S. Hallett, 557.
Oxalate method of separating magnesium and ——. W. T. Hall, 65.
Separation of beryllium from ——. 367.
- Calibration** of graduated tubes; Meniscus corrections involved in the ——. A. Møre, 630.
- Californian walnut oil**; Composition of ——. G. S. Jamieson and R. S. McKinney, 241.
- Calorimeters**: Benzoic acid as a standard for the standardisation of combustion ——. P. E. Verkade, 124.
- Calorimetric investigations.** Benzoic acid as a standard for the standardisation of combustion calorimeters. P. E. Verkade, 124.
- Camphor** in pharmaceutical preparations; Determination of ——. J. Bougault and Bl. Leroy, 46.
- Canned peas**; Occurrence of the tetanus bacillus in ——. F. Marsh and J. Henderson, 536.
- Cantharidin**: New reactions of ——. H. W. Van Urk, 425.
- Caproic Acid**: Lauric acid in presence of ——. 108.
- Caraway Seeds**: Boron compounds in ——. 18.
- Carbohydrate** in rye flour; New ——. J. Tillmans, 43.
- Carbon**: Atomic weight of ——. 295.
Compounds; Pyrolysis of ——. (Review), C. D. Hurd, 689.
deposit from ethyl petrol. 540.
determinations with the use of a metal tube. S. Avery, 66.
Industrial ——. (Review), C. L. Mantell, 622.
Micro-determination of — by the use of chromic acid oxidation. A. Boivin, 117.
organic — in soils; Determination of. G. W. Robinson, W. McClean and R. Williams, 360.
- Carbon Disulphide** in air; Detection and determination of ——. E. Selivounoff, 488.
in fluids; Detection and determination of ——. J. A. Pierce, 768.

- Carbon Monoxide** in blood; Determination of —. W. M. M. Pilaar, 553.
poisoning. 600.
- Carbon Steel**: arsenic in —; Determination of. 527.
- Carbonisation**: Assay of coal for — purposes. Fuel Research Paper No. 21. 233.
- Carbosine**: Determination of —. W. M. Clifford and V. H. Mottram, 51.
- Cardiff**: Appointment of Public Analyst for County Borough of —. 285.
- Carotene**: Vitamin A and —. I. Association of vitamin A activity with — in the carrot root. T. Moore, 765.
- Carotin**: Alleged relation of — to vitamin A. W. Duliere, R. A. Morton and J. C. Drummond, 764.
in flour; Determination of —. C. G. Ferrari and C. H. Bailey, 604.
- Carrot root**; Association of vitamin A activity with carotene in the —. T. Moore, 765.
- Cast Iron**: Sulphur determination by the evolution process in steels and —. N. D. Ridsdale, 166.
- Castanha de Arara Nuts**: A new oil seed from Brazil. 177.
- Castor Beans** in feeding stuffs; Detection of —. M. Wagenaar, 560.
- Castor Oil**: Halogen absorption of —. 446.
Petroleum spirit test for purity of —. T. T. Cocking, 548.
Solubility tests of —. H. P. Trevithick and M. F. Lauro, 297.
- Castrona bark**. 753.
- Cat fur**; Characteristics of —. 695.
- Catalase** test for the degree of heating of milk. 238.
- Catalysts** for the oxidation of sulphur dioxide; Platinised silica gels as —. H. N. Holmes, J. Ramsay and A. L. Elder, 771.
- Catalytic Processes** in Applied Chemistry. T. P. Hilditch, 314.
- Cathode Rays**: Comparison of the antirachitic potency of ergosterol irradiated by ultra-violet light and by exposure to —. A. Knudson and C. N. Moore, 183.
- Catsup**: Tomato —. 163.
- Cellular toxicity** of gaseous and volatile poisons. S. Lallemand, 359.
- Cellulose** solutions; Manufacture, use and storage of —. 234.
- Centrophorus Granulosus**: Oil of —. E. André and H. Canal, 606.
- Ceric Ion**: Potentiometric study of the reaction between ferrocyanide ion and —. N. H. Furman and O. M. Evans, 371.
- Ceric Sulphate** as a volumetric oxidising agent. VIII. Determination of chromium. H. H. Willard and P. Young, 190.
in volumetric analysis. V. Potentiometric study of the reaction between ferrocyanide and ceric ions. N. H. Furman and O. M. Evans, 371; VI. Oxidation of hydrogen peroxide by —. Indirect determination of lead. N. H. Furman and J. H. Wallace, 490.
- Ceric Sulphate**—*continued*.
quantitative oxidation with —; Experiments on. A. J. Berry, 461.
- Cerium**: Atomic weight of —. 295.
Separation of gallium from —. 367.
- Cetorhinus Maximus, Günner**: Fatty oils of the "pilgrim" whale (—). E. André and H. Canal, 605.
- Ceylon**: Report of the Government Chemist for 1928. C. T. Symons, 544.
- Chaulmoogra** group of oils; Thiocyanogen value of —. E. I. Van Italie, 606.
- Chaulmoogra Oil**: Glycerides of —. A. Bömer and H. Engel, 423.
- Charred** bank notes. 289.
- Cheese**: American —. 161.
Bondon —. 661.
Milk —. (Legal Notes), 540.
Tin-foil as a packing for rindless —. Elten, —, 552.
- Chemical Analysis**. Vol. XXVI. (Review), Ed. by B. M. Margosches, 310.
analysis; Lunge and Keane's Technical methods of —. Second edition. Edited by C. A. Keane and P. C. L. Thorne. (Review), 66.
Analysis; Photometric —. Vol. I. Colorimetry. (Review), J. H. Yoe, 193; Vol. II. Nephelometry. J. H. Yoe, 314.
analysis; Spectrographic —. H. Ramage, 373.
Pathology; Handbook of Clinical —. F. S. Fowweather, 314.
- Chemicals**: Analysis of Drugs and —. (Review), N. Evers and G. D. Elsdon, 774.
- Chemistry**: Analytical —. Vol. II. Quantitative. (Review), W. T. Hall, 258.
Annual Survey of American —. Vol. III. C. J. West, 130.
Applied —. See **Applied Chemistry**.
Contemporary Developments in —. (Review), 262.
Hermes or the Future of —. T. W. Jones, 130.
in Daily Life. S. Glasstone, 692.
in Medicine. (Review), 312.
Inorganic. See **Inorganic Chemistry**.
in the Home. (Review), J. B. Firth, 625.
Physiological —. See **Physiological Chemistry**.
Theoretical —; A Comprehensive Treatise of Inorganic and. (Review), J. W. Mellor, 377.
- Chemists' Pocket Book**; Bayley's —. 9th Ed. (Review), R. Ensoll, 495.
Year Book, 1929. (Review), F. W. Atack, 563.
- Chenopodium Oil**: Toxicity of —. 476.
- Cherries**: Boron compounds in crystallised —. 16; in fresh —, 17.
- Cherry Laurel**: Microchemical distinction of —. 363.
- Chewing Gum**: Drugs in —. 748.
- Chia Seed Oil**: W. F. Baughman and G. S. Jamieson, 677.
- Chickens**: Vitamin D and resistance of — to parasitism. J. E. Eckert and L. A. Spindler, 356.

- Chillies**: Manganese in ——. 348.
- Chimica Applicata**: Dizionario di Merceologia e di ——. Vol. I. 5th Ed. G. V. Villavecchia, 502.
- Chinese crackers**, 546.
wood oil (tung oil); Constitution of α -elaeostearic acid, the most important component of ——. J. Böeseken, 305.
- Chloral** in syrup of chloral; Determination of ——. Ch. Lorman, 244.
- Chlorate** method for determining nitrate nitrogen, total nitrogen, and other elements in soils and plant tissues. E. M. Emmert, 491.
- o*-Chlorbenzaldehyde**: Menthone as reagent for ——. 486.
- Chlorides**: Use of mixed bromides in place of —— in determining alkalis. E. Spencer and K. B. Sen, 224.
- Chlorine**: Atomic weight of ——. 295.
in rag flock from coconut fibre; Excess of soluble ——. (Legal Notes), 157.
treatment of flour (Parliamentary Notes), 165.
- p*-Chloroaniline** as a means of separating titanium from beryllium. 269.
- Chlorodyne B.P. '85** without morphine. (Legal Notes), 543.
- Chloroplast pigments** in the peel of bananas; Quantitative changes in the —— during ripening. H. von Loesecke, 611.
- Cholesterol** from cod-liver oil; Action of —— in a photographic plate. L. Hugounenq and E. Couture, 182.
- Cholesterols**: Fatty oil of the "pilgrim" whale. Biological relations between the —— and squalene. E. André and H. Canal, 605.
- Chrome Alum**: Iodimetric determination of chromium (chromic oxide) in ——. J. E. S. Han, 307.
- Chromic Acid** oxidation; General method for the micro-determination of carbon by the use of ——. A. Boivin, 117.
- Chromic Oxide** in chrome alum; Iodimetric determination of ——. J. E. S. Han, 307.
- Chromium**: Atomic weight of ——. 295.
Determination of ——. Ceric sulphate as an oxidising agent. H. H. Willard and P. Young, 190.
in chrome alum; Iodimetric determination of ——. J. E. S. Han, 307.
Separation of gallium from ——. 367.
- Chromium Oxide** in lead paints; Determination of ——. E. J. Davis, 621.
- Chromium Steels**: Rapid method for dissolving high —— for the determination of sulphur. B. S. Evans, 286.
- Chutney**: Boron compounds in ——. 18.
- Cinchona** barks; Two South American ——. L. Rosenthaler, 753.
- Cinnamaldehyde**: Menthone as reagent for ——. 486.
- Cinnamic Acid**: Halogen absorption of ——. 448.
- Cinnamon**: Sand in ——. (Legal Notes), 157.
- Cinnamon Oil**: Microchemical distinction of ——. 363.
- Cinnamyl Alcohol**: Halogen absorption of ——. 448.
- Citral**: Menthone as reagent for ——. 486.
- Citronella Oil**: geraniol content of ——; Determination of the total. *M. Van der Slik and J. Vermeulen, 767.
- Citronellal**: Menthone as reagent for ——. 486.
- Citrus**: Cytological study of water-soluble and fat-soluble constituents of ——. J. Dufrenoy, 421.
- Citrus Oil**: Microchemical distinction of ——. 363.
- Clinical Chemical Pathology**; Handbook of ——. (Review), F. S. Fowweather, 775.
- Clove Oil**: Microchemical distinction of ——. 363.
- Coal**: Assay of —— for carbonisation purposes. Fuel Research Paper No. 21. 233.
fusain in bituminous ——; Electrostatic method of determining. J. D. Davis and J. A. Younkings, 616.
in nickel-lined bombs; Determination of heat value of ——. A. E. Stoppel and E. P. Harding, 65.
- Coal Tar** colours in food; Certification of ——. The permitted dyes. (U.S. Dept. of Agriculture Regulation), 345.
colours in foodstuffs; Detection of the prohibited ——. J. R. Nicholls, 335.
- Coals**: hygroscopic moisture in ——; Determination of. H. Löffler, 433.
- Cobalt**: Atomic weight of ——. 295.
Colorimetric method for the micro analysis of ——. L. Michaelis and S. Yamaguchi, 620.
in driers, japans, alloys, etc.; Determination of ——. O. Heim, 464.
Potassium cyanate as a reagent for the detection of ——. B. J. F. Dorrington and A. M. Ward, 327.
Separation of beryllium from ——. 367.
- Cobaltinitrite** volumetric method of determining potassium in soil extracts. G. Milne, 558.
- Coconut**: Boron compounds in ground ——. 18.
fibre; Excess of soluble chlorine in rag flock from ——. (Legal Notes), 157.
fresh "meat"; Manganese in ——. 348.
- Coconut Oil**: Detection of —— by means of a test for lauric acid. J. Grossfeld and A. Miermeister, 242.
Halogen absorption of ——. 446.
- Cod** muscle protein. 36.
- Cod-Liver Meal**: Antirachitic properties of ——. R. N. Bethke, G. Zinzalian, D. C. Kennard, and H. L. Sassaman, 182.
- Cod-Liver Oil**: Action of cholesterol from —— on a photographic plate. L. Hugounenq and E. Couture, 182.
antirachitic vitamin in different samples of milk, butter and ——; Variations in amounts of. K. H. Coward, 302.
arsenic in ——; Normal occurrence of. E. Sadolin, 547.
Halogen absorption of ——. 446.
Manganese in ——. 348.
tablets, 598, 741.
vitamin tests. 163.
- Coffee**: Caffeine-free ——. (Legal Notes), 469.
- Coke**: Reactivity of ——. (Fuel Research Paper No. 22). 471.

- Colloid Chemistry**—Theoretical and Applied. Vol. II. Biology and Medicine. (Review), Ed. by J. Alexander, 263.
- Symposium Monograph. No. 6 (Review), 68.
- Colorimetry**: Photometric Chemical Analysis. Vol. I. —. (Review), J. H. Yoe, 193.
- Colouring Matters**: Determination of nitrogen by the Kjeldahl method, applied to the analysis of intermediates and —. P. Sisley and M. David, 434.
- Fluorescence of — in ultra-violet light. A. Seyewetz and J. Blanc, 309.
- Colours** in foodstuffs; Detection of the prohibited vegetable and coal tar —. J. R. Nicholls, 335.
- Columbium**: Atomic weight of —. 295.
- Combustion** calorimeters; Benzoic acid as a standard for the standardisation of —. P. E. Verkade, 124.
- Gaseous — at High Pressures. W. A. Bone, D. M. Newitt and D. T. Townend, 692.
- Compounds**: Carbon —; Pyrolysis of. C. D. Hurd, 380.
- organic-; Quantitative analysis of tin in —. H. Gilman and W. B. King, 365.
- unsaturated-; Use of ozone for determining the constitution of —. J. Doeuvre, 361.
- Condiment**: Monosodium glutamate as a chemical —. J. E. S. Han, 751.
- Congo**: Palm oil from the Belgian —. G. S. Jamieson and R. S. McKinney, 477.
- Connecticut** Agricultural Experiment Station. Report on Food Products and Drug Products for 1927, 160.
- Copper** alloys; Determination of antimony in — by means of sodium hydrosulphite. 396.
- alloys; Determination of traces of antimony in —. S. G. Clarke and B. S. Evans, 23.
- antimony in —; Determination of traces of. S. G. Clarke and B. S. Evans, 23.
- Application of the thiocyanate method for precipitating — in the confirmatory tests for cadmium and antimony. A. F. Daggett, 679.
- arsenic in —; Determination of. 525.
- Atomic weight of —. 295.
- content of feeding stuffs. C. A. Elvehjem and E. B. Hart, 421.
- content of milk; Effect of diet on the —. C. A. Elvehjem, H. Steenbock and E. B. Hart, 555.
- content of plant and animal foods. C. W. Lindow, C. A. Elvehjem and W. H. Peterson, 420.
- Determination of small quantities of — with 5, 7-Dibromo-*o*-oxyquinoline. L. W. Haase, 618.
- Electrometric determination of —. I. Müller and Rudolph's method. M. E. Pring and J. F. Spencer, 509. II. Application of Volhard's method to electrometric analysis. 576.
- Further proof that the anaemia produced on diets of whole milk and iron is due to a deficiency of —. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
- Copper**—*continued*.
- in antiquity, 125.
- in biological materials; Determination of —. C. A. Elvehjem and C. W. Lindow, 245.
- in blood; Distribution of —. C. A. Elvehjem, H. Steenbock and E. B. Hart, 555.
- in presence of iron; Detection of —. L. Szebellédy, 63.
- in the organism; Some physiological aspects of —. F. B. Flinn and J. M. Inouye, 758.
- Low's short iodide method for — modified. H. F. Bradley, 63.
- mercury in presence of —; Determination of. 160.
- New reagent for the colorimetric determination of minute amounts of —. T. Callan and J. A. R. Henderson, 650.
- New sensitive colour reaction of —. S. G. Clarke and B. Jones, 333.
- Rapid microchemical determination of mercury and —. (a) G. Spacu and J. Dick; (b) G. Spacu and G. Suciu, 768.
- Separation of beryllium from — by *o*-hydroxyquinoline. M. Niessner, 434.
- solution; Observations upon Benedict's alkaline —. (Determination of sugar in blood.) M. R. Everett, 430.
- solutions; Determination of reducing sugars, particularly of glucose, by alkaline — in presence of hydrocyanic acid. H. Herissey and A. Chalmers, 421.
- Storage of manganese and — in the animal body and its influence on haemoglobin building. R. W. Titus and J. S. Hughes, 609.
- Copper Salts**: Action between glycerol and —. B. K. Vaidya, 308.
- Cordials**: Orange —. 748.
- Unfermented —. 591.
- Cornwall**: Appointment of Public Analyst for County of —. 285.
- Corrosion-resisting steel** for laboratory use. G. A. Stokes, 538.
- Cosmetics**: Isopropyl alcohol in — detected by means of piperonal. G. Reif, 552.
- Perfumes, — and Soaps. Vol. II. W. A. Poucher, 314.
- Coumaraldehyde**: Menthone as reagent for —. 486.
- Cow**: Age of the — as a factor affecting the yield and quality of milk. R. R. Kay and H. C. McCandlish, 353.
- "Appeal to the —" samples. 466.
- vitamin B in the rumen of the —; Synthesis of. S. I. Bechdel, H. E. Honeywell, R. A. Dutcher, and M. H. Knutsen, 55.
- Crab** preparations; Evaluation of — and detection of — ingredients. G. Bi and A. Miermeister, 546.
- Crab Liver Oil**: M. Tsujimoto, 44.
- Crackers**: Chinese —. 546.
- Cranberries**: Boron compounds in —. 17.
- Mineral constituents of —. F. W. Morse, 178.

- Cream:** Artificial —. (Legal Notes), 542, 594.
 Artificial — Act, 1929 (Parliamentary Notes), 341. (Ministry of Health Circular, No. 989), 344.
 buns, 740.
 cakes; Definition of —. 468.
 labelled as "pure thick —," 31.
 Reconstituted — Bill. 174.
 Tinned "thick" —. (Legal Notes), 338.
- Creatine and Creatinine.** (Review), A. Hunter, 195.
 content of the muscles and some other tissues in fishes. A. Hunter, 299.
- Creatinine:** Chemistry of Jaffe's reaction for —. V. Isolation of the red compound. I. Greenwald, 60.
 Creatine and —. (Review), A. Hunter, 195.
 determination; Purification of picric acid for —. S. R. Benedict, 428.
 in muscle; Micro method for determining the total —. S. Ochoa and J. G. Valdecasas, 247.
 Luminescence of —. G. Reif, 757.
- Cresol Red:** Use of — in acid solutions. F. R. McCrumb and W. R. Kenny, 489.
- Cresyl Esters** of phenyl-acetic acid. L. C. Raiford and L. G. Hildebrand, 616.
- Cricket Oil:** 306.
- Croton Oil:** Halogen absorption of —. 448.
- Crotonaldehyde:** Menthone as reagent for —. 486.
- Crotonic Acid:** Halogen absorption of —. 448
- Crustaceofulvin:** 546.
- Crustaceorubin:** 546.
- Cryoscopic** method for detecting added water in milk. R. L. Andrew, 210.
- Crystal Structure** and Chemical Constitution, 502.
 Structure of an Organic —. Sir W. H. Bragg, 130.
- Cupric Salts:** Reaction of — with thiosulphate. J. Hanus and V. Hovorka, 254.
- Cupro-Nickel:** antimony in —; Determination of traces of, 27.
- Curcas Oil:** 475.
- Currants:** Boron compounds in —. 16.
 Marking of — under the Merchandise Marks Act, 1928. 170.
- Cyanides:** silver in presence of halides and —; Volumetric method of determining. H. Baines, 678.
- Cyanocrystallin:** 546.
- Cystine** in proteins; Improved colorimetric method for determining —. O. Folin and A. D. Marenzi, 553.
 Separation of — from histidine. H. B. Vickery and C. S. Leavenworth, 677.
- Cytological** study of water-soluble and fat-soluble constituents of citrus. J. Dufrenoy, 431.
- D**
- Dairy Bacteriology.** (Review), B. W. Hammer, 442.
- Dates:** Boron compounds in Persian —. 16.
- Dermatitis:** Chemical examination of furs in relation to —. H. E. Cox, 694.
 Occurrence of — in industry. 745.
- Detergents:** Applied Chemistry. Vol. I. —. (Review), C. K. Tinkler and H. Masters, 311.
- Dextrins:** Quantitative separation of gum arabic and —. A. Hamy, 253.
- Dextrose** in presence of hydrocyanic acid; Determination of — by means of alkaline copper solutions. H. Hérissé and A. Chalmers, 43.
- Diastase** in heated honey. L. H. Lampitt, E. B. Hughes and H. S. Rooke, 381.
- Dibenzal-Sorbitol:** Detection of fruit wine in grape wine by means of —. C. von der Heide and K. Hennig, 422.
- 5, 7-Dibromo-o-Oxyquinoline:** Determination of small quantities of copper with —. L. W. Haase, 618.
- 2, 6-Dichlorophenol** as a reduction indicator in the examination of foodstuffs. J. Tillmans, P. Hirsch and E. Reinshagen, 176.
- Diet:** Effect of — on the copper content of milk. C. A. Elvehjem, H. Steenbock and E. B. Hart, 555.
 of whole milk and iron; Further proof that the anaemia produced by — is due to a deficiency of copper. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
- Digestibility** of protein; Determination of the — by Bergeim's method. W. D. Gallup, 247.
- Digitalis** glucosides. III. Gitoxigenin and isogitoxigenin. W. A. Jacobs and E. L. Gustus, 425.
 Keeping properties of — and some of its preparations. H. B. Haag and R. A. Hatcher, 608.
 Standardisation of tincture of —. F. Wokes, 426.
- Digitonin:** Study of the — ergosterol complex. M. H. Pénau and Z. Hardy, 254.
- Di-Hydroxy Acetone:** Use of — in detecting and differentiating phenols. A. H. Ware, 614.
- p-Dimethylaminobenzaldehyde** as means of determining tryptophan. W. J. Boyd, 354.
- Diphenylamine:** Colour reaction of —. L. Desvergnés, 243.
- Diphtheria:** Examination for —. 592.
- Disease:** Aspects of Age, Life and —. Sir H. Rolleston, 130.
- Diseases:** Industrial —. (Report of the Chief Inspector of Factories and Workshops, 1928.) 745.
- Distillation:** fractional; Separator for — under reduced pressure. R. Delaby and R. Charonnat, 124.
- Divinylglycol** as the cause of the bitter flavour of wines suffering from bitterness. E. Voisenet, 421.
- Dizionario di Merceologia e di Chimica Applicata.** Vol. I. 5th Ed. G. V. Villavecchia, 502.

- Documents:** Questioned —. 2nd Ed. (Review), A. S. Osborn, 501.
- Dorset:** Average composition of milk in —. 467.
- Dried Fruits:** Boron compounds in —. 16.
- Driers:** cobalt in —; Determination of. O. Heim, 464.
- Dripping:** Paraffin wax in —. (Legal Notes), 32.
- Drowning:** Blood tests in connection with —. 599.
- Drug Products;** Connecticut Agricultural Experiment Station Report on —. 160. tablets; Talc in —. 156.
- Drugs:** Analysis of — and Chemicals. (Review), N. Evers and G. D. Elsdon, 774. boron compounds in food and —; Study of the methods of determining. A. S. Dodd, 645. Part II. Experimental: Effect of fats and other organic substances on the determination. A. S. Dodd, 715. in chewing gum. 748. Laboratory Manual for the Detection of Poisons and powerful —. (Review), W. Autenreith, 126.
- Drying apparatus;** Barium sulphate as indicator of the efficiency of sulphuric acid in —. G. Boehm, 373.
- Dry-Rot** in wood; Biochemistry of —. E. C. Barton-Wright and J. G. Boswell, 358.
- Durham:** Average composition of milk in the County of —. 467.
- Dutch lard;** Luminescence of a genuine — in ultra-violet light. A. Van Druuten, 347.
- Dyes:** Aniline — in paints. 748. as an indication of adulteration in butter. D. Henville and W. M. Paulley, 413. Studies on the combination between certain basic — and proteins. L. M. C. Rawlins and C. L. A. Schmidt, 487.
- Dyestuffs:** Irritant —. 696. Reactions of — with nitrous acid. J. B. Dubský and A. Okáč, 60.
- Dysprosium:** Atomic weight of —. 296.
- E**
- Earth Acid test;** Tartaric hydrolysis as an important —. 456.
- Earth Acids:** Oxylate-salicylate method for small quantities of —. 322. Quantitative precipitation of the — and certain other oxides from tartrate solution. W. R. Schoeller and H. W. Webb, 704. Tartaric hydrolysis method for small quantities of —. 321.
- Egg albumin;** Loosely-bound sulphur in —. W. D. Treadwell and W. Eppenberger, 114. flour. (Legal Notes), 105. preservation and the registration of premises. (Ministry of Agriculture and Fisheries Notice.) 746. shell; Manganese in —. 348. yolk and white; Difference in osmotic concentration between —. J. Straub, 296. yolk; Manganese in —. 348.
- Eggs:** Agricultural Produce (Grading and Marking Regulations, 1928). 172. Dried-; Marking of — under the Merchandise Marks Act, 1928. 171. in shell; Marking of — under the Merchandise Marks Act, 1928. 170. Labelling of — in America. 161. preserved-; Marking of —. 173. Removal of origin marks from —. (Legal Notes), 664, 743.
- Egypt:** Nature of the colour of pottery, with special reference to that of ancient —. A. Lucas, 686.
- Eijkman fermentation test** as an aid in detecting faecal organisms in water. L. W. Leiter, 484.
- Elaeostearic Acid:** Halogen absorption of —. 445.
- α -Elaeostearic Acid:** Constitution of —, the most important component of Chinese wood oil (tung oil). J. Böeseken, 305.
- β -Elaeostearic Acid Glyceride** and wood oil. Partial halogen addition to unsaturated fatty acids. H. P. Kaufmann and C. Lutenberg, 304.
- Electro-Analytic** determination of thallium as thallic oxide. A. Jilek and J. Lukas, 681.
- Electrochemistry:** Principles and Applications of —. (Review), H. J. Creighton, 192.
- Electrolysis:** Determination of tin by rapid —. J. Svěda and R. Uzel, 366.
- Electrolytic analysis;** New apparatus for —. H. J. S. Sand, 275. determination of lead in urine. T. Cooksey and S. G. Walton, 97. method for determining small amounts of mercury in body fluids and tissues. A. G. Young and F. H. K. Taylor, 759. separation of lead and bismuth with controlled potential. E. A. Collin, 654.
- Electrometric** determination of copper. I. Müller and Rudolph's method. M. E. Pring and J. F. Spencer, 509. II. Application of Volhard's method to electrometric analysis. 576.
- Electrostatic** method for determining fusain in bituminous coal. J. D. Davis and J. A. Younkings, 616.
- Enzyme** Actions and Properties. E. Waldschmidt-Leitz, 502.
- Enzymes:** Reaction of azine compounds with proteolytic —. G. M. Richardson and R. K. Cannan, 761.
- Enzymic** conversion of uric acid into allantoinic acid. R. Fosse, A. Brunel and R. de Graeve, 557.
- Ephedras:** Indian —. Their extraction and assay. S. Krishna and T. P. Ghose, 297.
- Erbium:** Atomic weight of —. 296.
- Ergosterol** and its esters; Studies on highly purified —. C. E. Bills and E. M. Honeywell, 53. antirachitic potency of — irradiated by ultra-violet light and by exposure to cathode rays; Comparison of. A. Knudson and C. N. Moore, 183.

Ergosterol—*continued*.

Biological inertness of irradiated mycosterols other than —. O. Rosenheim and T. A. Webster, 248.

Formation and destruction of vitamin D on the irradiation of —. D. Van Stolk, E. Dureuil and Heudebert, 54.

Irradiation of —. T. A. Webster and R. B. Bourdillon, 52.

Specific colour reaction for —. O. Rosenheim, 355.

Study of the digitonin — complex. M. H. Pénaud and Z. Hardy, 254.

Ergot in flour; Colorimetric determination of —. F. S. Okoloff, 352.

in flour; Determination of — by a serological method. F. S. Okoloff and I. G. Akimoff, 353.

Ergot of Rye alkaloids; Reaction for —, ergotamine, ergotoxine and ergotinine. H. W. Van Urk, 479.

Vitamin D in —. E. Mellanby, E. Surie and D. C. Harrison, 766.

Ergotamine: Reaction for —. H. W. Van Urk, 479.

Ergotinine: Reaction for —. H. W. Van Urk, 479.

Ergotoxine: Reaction for —. H. W. Van Urk, 479.

Essential Oil Sub-Committee to the Standing Committee on Uniformity of Analytical Methods. Report on Physical Constants (2). 335.

Essential Oils: Boiling points of —. 337.

Freezing point of —. 335.

Melting point of —. 335.

Microchemical distinctions of —. L. Rosenthaler, 362.

Physical constants of —. 335.

primary phenylethyl alcohol in —; Identification of. S. Sabetay, 615.

Esters of the component fatty acids of linseed oil; Film characteristics of —. B. H. Thurman and W. R. Crandall, 186.

Ether for anaesthetic use; Purification and preservation of —. S. Palkin and H. R. Watkins, 756.

for analytical use; Purity of —. G. Middleton, 45.

Preservation of anaesthetic —. C. L. Hewer, 352.

Ethyl Alcohol: Analysis of mixtures containing acetone, isopropyl alcohol and —. C. A. Adams and J. R. Nicholls, 2.

Determination of —. 2.

Oxidation of —. 7.

Ethyl Petrol: Carbon deposit from —. 540.

Ethyl Protocatechuic Aldehyde: Comparative study of methyl and —. L. Klotz, 752.

Ethyl Vanillin in flavouring extracts; Detection of —. 752.

Ethylene: Determination of — by absorption in a solution of silver nitrate. V. N. Morris, 487.

Eucalyptus Oil: Microchemical distinction of —. 363.

Europium: Atomic weight of —. 296.

F

Fabrics: Cube photometer for comparing the whiteness of —. A. Adderley, 684.

Fachini's Reaction for detecting olive residue oils. R. Marcille, 346.

Factories and Workshops: Report of the Chief Inspector of — for 1928. Industrial diseases. 745.

Faecal organisms in water; Eijkman fermentation test as an aid in detecting —. 484. L. W. Leiter, 484.

Fairhall process of determining lead in urine. 726.

Fat in leather; Determination of —. D. Woodroffe, 188.

neutral — in sulphonated oils; Determination of. R. Hart, 306.

Fat-soluble constituents of citrus; Cytological study of —. J. Dufrenoy, 431.

Fats: Absorption spectra and fluorescence of —. H. P. Kaufmann, 309.

containing linolenic acid; Analysis of — by means of the thiocyanogen value of. Analysis of linseed oil. H. P. Kaufmann and M. Keller, 304.

containing vitamin A; Fluorescence of —. R. S. Morgan and K. MacLennan, 250.

Differential halogen absorption of oils and —. J. W. Croxford, 445.

Effect of — on the determination of boron compounds in food and drugs. A. S. Dodd, 715.

from intact seeds and fruits; Detection of rancidity in —. A. Niethammer, 548.

Luminescence of oils and —. A. van Raalte, 110.

Seed — of some cultivated species of umbelliferae. B. C. Christian and T. P. Hilditch, 547.

Separation of solid — into their constituents. A. van Raalte, 605.

Fatty Acid of liver lipids; Highly unsaturated —. Preparation of arachidonic acid. J. B. Brown, 113.

Fatty Acids: Action of iodine chloride solutions on — with conjugated double linkings. Determination of the iodine value. E. T. Gelber and J. Böeseke, 305.

associated with rice starch. L. Lehrman, 548. higher-; Conversion of — into their barium salts. H. H. Escher, 252.

in tissues; Distribution of unsaturated —. III. Vital organs of beef. W. R. Bloor, 112. of linseed oil; Film characteristics of the esters of the component —. B. H. Thurman and W. R. Crandall, 186.

of some New Zealand butters; Component glycerides and the —. T. P. Hilditch and E. E. Jones, 75, 152.

- Fatty Acids**—*continued*.
 unsaturated-; Application of the hydrogen value to —. H. J. Waterman, S. H. Bertram and H. A. Van Westen, 252.
 unsaturated-; Partial halogen addition to —. β -Elaostearic acid glyceride and wood oil. H. P. Kaufmann and C. Lutenberg, 304.
- Fatty Foods**: vitamin *A* in —; Test for. A. Andersen and E. Nightingale, 481.
- Fatty Oil** of the "pilgrim" whale. Biological relations between the cholesterol and squalene. E. André and H. Canal, 605.
- Fatty Oils**: Cold test for —. R. R. Matthews, 433.
- Federated Malay States**: Annual Report of the Institute for Medical Research for 1927. 290.
- Feeding Stuffs**: castor beans in —; Detection of. M. Wagenaar, 560.
 Copper content of —. C. A. Elvehjem and E. B. Hart, 421.
- Fennel Oil**: Microchemical distinction of —. 363.
- Fermentation**: Eijkman — test as an aid in detecting faecal organisms in water. L. W. Leiter, 484.
 Problem of —: The Facts and Hypotheses. (Review), M. Schoen, 440.
- Ferricyanide** method for blood sugar; Note on the new —. O. Folin, 246.
 reagent used in the gasometric sugar method; Reducing powers of different sugars for the —. J. A. Hawkins, 749.
- Ferrocyanide**: Determination of —. Colour indicators for permanganate titrations. J. Knop, 437.
- Ferrocyanide Ion**: Potentiometric study of the reaction between ceric ion and —. N. H. Furman and O. M. Evans, 371.
- Ferrocyanides**: Oxidation of —. 462.
- Fertilisers and Feeding Stuffs Act, 1926**. Procedure under Section 13(3). 344.
 (Review), H. J. Johns, 196.
- Fery** spectroscope for the qualitative analysis of metals. 546.
- Fibres**: animal-; Protection of — against clothes moths and dermestid beetles. C. O. Clarke, 126.
- Fische Test** for detecting artificial invert sugar in honey; Modification of —. E. K. Nelson, 603.
- Figs**: Boron compounds in Turkish —. 16.
- Films**: Solubility of Reinsch antimony — in water. S. G. Clarke, 99.
- Fish**: arsenic in —; Normal occurrence of. E. Sadolin, 547.
 by-products. Food Investigation Board Report on —. 35.
 Creatine content of the muscles and some other tissues in —. A. Hunter, 299.
 meals; Nutritive value of —. 35.
 Poisonous —. 544.
 Sterols extracted from —. 36, 37.
- Fish Oils**: Bleaching of —. 36.
 Comparison of biological and colorimetric assays for vitamin *A* as applied to —. E. R. Norris and I. S. Danielson, 612.
- Fisheries**: Ministry of —. See Ministry of Agriculture and Fisheries.
- Firefly Oil**: 305.
- Flavourings**: Boron compounds in —. 18.
- Flour**: carotin in —; Determination of. C. G. Ferrari and C. H. Bailey, 604.
 Chlorine treatment of —. (Parliamentary Notes), 165.
 Egg —. (Legal Notes), 105.
 ergot in —; Colorimetric determination of. F. S. Okoloff, 352.
 Ergot in — determined by a serological method. F. S. Okoloff and I. G. Akimoff, 353.
 Rye — in wheat and other —; Detection of. J. Tillmans, 43.
- Flowers of Sulphur**: Action of air on ground sulphur and —. J. E. Stephenson and S. W. Bridge, 590, 737.
- Fluids**: Body —. See Body Fluids.
 carbon disulphide in —; Detection and determination of. J. A. Pierce, 768.
- Fluorescence**: Method of identification and determination of the value of rhubarbs, based on —. Maheu, —, 478.
 of colouring matters in ultra-violet light. A. Seyewetz and J. Blanc, 309.
 of fats; Absorption spectra and —. H. P. Kaufmann, 309.
 of some vitamin *A*-containing fats. R. S. Morgan and K. MacLennan, 250.
- Fluorine**: Atomic weight of —. 295.
 compounds; Analysis of insecticides containing —. L. Hart, 621.
- Fluorspar**: silica in presence of —; Determination of. W. T. Schrenk and W. H. Ode, 771.
- Food**: boron compounds in drugs and —; Study of the methods of determining. A. S. Dodd, 645. Part II. Experimental: Effect of fats and other organic substances on the determination. A. S. Dodd, 715.
 coal-tar colours in —; Certification of. The permitted dyes. (U.S. Dept. of Agriculture Regulation.) 345.
 investigation; Index to literature of —. No. 1. A. E. Glennie, 566.
 preservation by Sulphur Dioxide Enabling Act, 1920. 597.
 preservative; Boric acid sold as —. (Legal Notes), 106.
 products; Comparison of the Monier-Williams and the A.O.A.C. methods for determining sulphurous acid in —. J. Fitelson, 297.
 Products; Connecticut Agricultural Experiment Station Report on —. 160.
 Products. Their Source, Chemistry and Use. E. H. and H. S. Bailey, 130.
- Food and Drugs Analysis**; Abstracts: 43, 108, 176, 237, 296, 346, 420, 476, 546, 603, 669, 748.
- Food and Drugs Act**: Validity of a summons under the new —. (Legal Notes), 156.
- Food, Drugs and Disinfectants Act of the Union of South Africa**. 600.

- Food Investigation Board Reports:** Report for the year 1927. 35.
 No. 33. A critical and historical study of the pectic substances of plants. 594.
 No. 35. Heat insulators. 743.
- Foods:** Copper content of plant and animal ——. C. W. Lindow, C. A. Elvehjem and W. H. Peterson, 420.
- Foodstuffs:** 2,6-dichlorophenol indophenol as a reduction indicator in the examination of ——. J. Tillmans, P. Hirsch and E. Reinshagen, 176.
 Manganese in ——. C. Newcomb and G. Sankaran, 348.
 prohibited vegetable and coal tar colours in ——. Detection of. J. R. Nicholls, 335.
 tin in ——. Volumetric method for determining. B. Glassmann and S. Barsutzkaja, 110.
 Zinc content of the principal vegetable ——. G. Bertrand and B. Benzou, 349.
- Forensic abstracts:** 55, 252, 358.
- Forgeries:** Shakespeare — in the Revels Accounts. (Review), S. A. Tannenbaum, 627.
- Formaldehyde** in certain pharmaceutical preparations; Determination of ——. O. Heim, 537.
 Menthone as reagent for ——. 486.
- Formol** titration in the investigation of honey. A. Gottfried, 670.
- Fox fur;** Characteristics of ——. 696.
- Fractional distillation.** See **Distillation.**
- Fraud:** Cases of — in Ceylon. 544.
- Freezing Point** of milk. A. Van Raalte, 266.
 of milk; Investigations on the relation between the acidity and ——. A. J. Parker and L. S. Spackman, 217.
 test for milk, 747.
- Fruit:** boron compounds in —; Natural occurrence of. A. Scott Dodd, 15.
 Dried ——. See **Dried Fruit.**
 Food Investigation Board Report on ——. 35.
 jellies; Manufacture of ——. 596.
 juices in wine; Detection of ——. J. Werder, 476.
 wine in grape wine; Detection of — by means of dibenzal-sorbitol. C. von der Heide and K. Hennig, 422.
 wine in grape wine; Detection of ——. B. Bleyer and W. Diemair, 603.
- Fruits:** antiscorbutic property of —; Effect of drying and of sulphur dioxide on. A. F. Morgan and A. Field, 483.
 rancidity in fats from intact —; Detection of. A. Niethammer, 548.
- Fuel Research Reports:** No. 21. Assay of Coal for Carbonisation Purposes (Part II), 233.
 No. 22. The reactivity of coke. 471.
- Fuels:** Applied Chemistry. Vol. I. ——. (Review), C. K. Tinkler and H. Masters, 311.
- Fumaric Acid:** Halogen absorption of ——. 448.
- Fungus:** Fruit-rotting ——. 35.
- Furfural** in heated honey. L. H. Lampitt, E. B. Hughes and H. S. Rooke, 381, 736.
- Furfuraldehyde** in honey; Tests for ——. 383.
 Menthone as reagent for ——. 486.
- Furs:** Chemical examination of — in relation to dermatitis. H. E. Cox, 694.
- Fusain** in bituminous coal; Electrostatic method of determining ——. J. D. Davis and J. A. Younkins, 616.

G

- Gadolinium:** Atomic weight of ——. 296.
- Galena:** sulphur in lead and —; Determination of. H. Leysaht, 489.
- Gallium:** Analytical chemistry of ——. L. Moser and A. Brukl. Part I, 64; Part II, 367.
 Atomic weight of ——. 295.
- Gas analysis apparatus;** Acetone as a control apparatus for ——. T. M. Carpenter, E. L. Fox and A. F. Serque, 427.
 Apparatus for the analysis of small samples of ——. H. R. Ambler, 517.
 Nomogram for converting observed volumes of — to normal temperature and pressure. J. H. Coste, 656.
 production in the making of sauerkraut. L. M. Preuss, W. H. Peterson and E. B. Fred, 57.
- Gases:** neon in natural —; Quantitative determination of. N. P. Péncheff, 617.
- Gasometric** determination of methaemoglobin. D. D. Van Slyke and A. Hiller, 760.
 sugar method; Reducing power of different sugars for the ferricyanide reagent used in the ——. J. A. Hawkins, 749.
- Gelatin:** Action of papain on the polarisation of ——. Measurement of proteolytic activity. H. C. Gore, 762.
 Emulsifying power of ——. 36.
- Geraniol** content of citronella oil; Determination of the total ——. M. Van der Slik and J. Vermeulen, 767.
- German Pharmacopoeia;** Arsenic test of the ——. G. Frerichs, 56.
 rape oil; Composition of ——. K. Täufel and C. Bauschinger, 187.
- Germanium:** Atomic weight of ——. 295.
- Gibraltar:** Report of the City Analyst and Bacteriologist for 1927. A. G. Holborow, 104; for 1928, 592.
- Ginger:** Boron compounds in ground ——. 18.
 Ground ——. 540.
 Japanese ——. L. Rosenthaler, 751.
 Sulphur dioxide in ground ——. (Legal Notes), 419, 664.
- Ginger Brandy:** Non-alcoholic products sold as ——. (Legal Notes), 288.
- Gitoxigenin** and isogitoxigenin. The digitalis glucosides. W. A. Jacobs and E. L. Gustus, 425.
- Glass:** Properties and applications of "Vita" ——. F. E. Lamplough, 495.
- Glassware:** Volumetric ——. (Review), V. Stott, 497.
- Glaze:** Lead in red ——. A. Gronover and E. Wohnlich, 552.

- Globe Fish poisoning**, 476.
- Glucose**: Determination of — by alkaline copper solutions in the presence of hydrocyanic acid. H. Herissey and A. Chalmers, 421.
in normal urine. A. Hassan, 30.
- Glucosides**: Digitalis —. III. Gitoxigenin and isogitoxigenin. W. A. Jacobs and E. L. Gustus, 425.
- Glyceraldehyde**: Menthone as reagent for —. 486.
- Glycerides** of cacao butter; Component —. C. H. Lea, 242.
of chaulmoogra oil. A. Bömer and H. Engel, 423.
of mutton tallow; Component —. G. Collin, T. P. Hilditch and C. H. Lea, 243.
of rape oil. K. Täufel and C. Bauschinger, 187.
of some New Zealand butters; The fatty acids and component —. T. P. Hilditch and E. E. Jones, 75, 152.
- Glycerol**: Action between copper salts and —. B. K. Vaidya, 308.
and the Glycols. (Review), J. W. Lawrie, 128.
Specific gravity of —. L. W. Bosart and A. O. Snoddy, 186.
Substitutes for —. 648.
- Glycolaldehyde**: Menthone as reagent for —. 486.
- Glycols**: Glycerol and the —. (Review), J. W. Lawrie, 128.
- Glyoxaldehyde**: Menthone as reagent for —. 486.
- Goat fur**; Characteristics of —. 696.
- Goats' milk**. 593.
milk; Boiled and unboiled —. 104.
milk; Examination of — for unboiled milk. A. G. Holborow, 658.
- Gold**: Atomic weight of —. 296.
- Gooseberries**: Boron compounds in —. 17.
- Gorli Oil**: Thiocyanogen value —. E. I. Van Italie, 607.
- Government Chemists' Reports**: See Ceylon, Gibraltar, New South Wales, New Zealand, Queensland, Siam, United Provinces of Agra and Oudh. See also Government Laboratory.
- Government Laboratory**: Report of the Government Chemist upon the work of the — for the year ending March 31st, 1929. 665.
- Grape juice**; Boron compounds in —. 19.
wine; Detection of fruit wine in —. B. Bleyer and W. Diemair, 603.
- Guaiacol Carbonate**: Determination of —. L. H. Chernoff, 756.
- Gum Arabic**: Composition of —. C. L. Butler and L. H. Cretcher, 477.
Nature of — and biochemical classification of the gums. A. G. Norman, 549.
Quantitative separation of dextrans and —. A. Hamy, 253.
- Gums**: Chemical constitution of —. I. Nature of gum arabic and biochemical classification of the —. A. G. Norman, 549.
- Gutzeit Test** for arsenic; Accuracy of the —. J. R. Neller, 618.
for arsenic; Production of uniform stains in the —. C. H. Manley, 30.

H

- Haemagglutinins**: Plant — with special reference to a preparation from the navy bean. V. R. Goddard and L. B. Mendel, 429.
- Haematology**: Recent Advances in —. (Review), A. Piney, 691.
- Haemoglobin** building; Storage of manganese and copper in the animal body and its influence on —. R. W. Titus and J. S. Hughes, 609.
- Hafnium**: Atomic weight of —. 296.
- Hagedorn and Jensen Method**: Application of — to the determination of larger quantities of reducing sugars. C. S. Hanes, 349.
- Hair-Dyes**: New derivatives of *p*-phenylenediamine and their value as —. H. Meyer, 675.
- Halides**: silver in presence of cyanides and —; Volumetric method for determining. H. Baines, 678.
- Halogen** absorptions of oils and fats; Differential —. J. W. Croxford, 445.
addition to unsaturated fatty acids. Partial —. β -Elaeostearic acid glyceride and wood oil. H. P. Kaufmann and C. Lutenberg, 304.
- Handwriting**: Experiments with —. R. Saudek, 130.
- Hare fur**; Characteristics of —. 695.
- Hassall, Dr. A. H.**: Crayon portrait of —. 567.
- Heat** and ultra-violet irradiation as means of differentiating vitamins *B* and *G* in yeast. C. Kennedy and L. S. Palmer, 674.
Effect of — on milk. (a) On the coagulability by rennet and (b) On the nitrogen, phosphorus and calcium contents. E. C. V. Mattick and H. S. Hallett, 557.
insulators. (Food Investigation Report No. 35.) 743.
- Helium**: Atomic weight of —. 295.
- Histidine**: Separation of cystine from —. H. B. Vickery and C. S. Leavenworth, 677.
- Histones**: The Protamines and —. A. Kossel. (Review), 71.
- Holmium**: Atomic weight of —. 296.
- Homatropine**: Microchemical reactions of —. M. Wagenaar, 47.
- Honey**: Analysis of —. 162.
Borax — deficient in borax. 31.
cake; Determination of honey in —. R. T. A. Mees, 108.
Examination of —. J. Fiehe and W. Kordatzki, 748.
Fluorescence of — in ultra-violet light. G. Orbán and J. Stitz, 240.
Formol titration in the investigation of —. A. Gottfried, 670.
Furfural and diastase in heated —. L. H. Lampitt, E. B. Hughes and H. S. Rooke, 381, 736.

- Honey**—*continued*.
 in honey cake; Determination of —. R. T. A. Mees, 108.
 invert sugar in —; Modification of the Fiehe test for detecting. E. K. Nelson, 603.
 Invertase from —. P. E. Papadakis, 669.
 Marking of — under the Merchandise Marks Act, 1928. 168.
 Melecitose in linden dew —. F. E. Nottbohm and F. Lucius, 670.
 oxymethylfurfural in — and artificial —; Quantitative determination of. J. Fiehe and W. Kordatzki, 241.
 oxymethylfurfural in —; Quantitative determination of. J. Fiehe, 108.
 Vitamin content of —. E. Hoyle, 356.
- Hoof Meal:** Determination of —. W. F. Sterling, 303.
- Hops:** Analysis of the bitter substances of —. W. Windisch, P. Kolbach and M. Winter, 422.
- Hull:** See Kingston-upon-Hull.
- Human blood;** Urobilin content of normal —. M. A. Blankenhorn, 116.
- Husks:** Rice — in bran and sharps. A. J. Amos, 332.
- Hydnocarpus Illicifolia Oil:** 475.
- Hydnocarpus Woodii** from North Borneo; Fruits and seeds of —. 347.
- Hydrochloric Acid** and vanillin reaction; Further application of — in the determination of tryptophane in proteins. I. K. Ragins, 115.
 solution; Titration of thallos salts with permanganate in —. A. Jilek and J. Lukas, 255.
- Hydrocyanic Acid:** Determination of reducing sugars, particularly of glucose, by alkaline copper solutions in the presence of —. H. Herissey and A. Chalmeta, 421.
 Reducing sugars, especially dextrose, in presence of — determined by means of alkaline copper solutions. H. Herissey and A. Chalmeta, 43.
- Hydrogen:** Atomic weight of —. 295.
 determinations with the use of a metal tube. S. Avery, 66.
 value of unsaturated compounds; Determination of —. H. I. Waterman, J. N. J. Perquin and H. A. van Westen, 119.
- Hydrogen Arsenide** poisoning; Distribution of arsenic in a body in a fatal case of —. F. J. T. Grigg, 659.
 poisoning in industry. 745.
- Hydrogen Ion Concentration:** Determination of — by a modified colorimetric method. D. H. Cameron, 365.
- Hydrogen Ions:** Their Determination and Importance in Pure and Industrial Chemistry. (Review), H. T. S. Britton, 687.
- Hydrogen Peroxide:** Oxidation of — by ceric sulphate. N. H. Furman and J. H. Wallace, 490.
 Tests for phenols involving the use of —. A. H. Ware, 561.
- Hydrogen Value:** Application of the — to unsaturated fatty acids. H. J. Waterman, S. H. Bertram and H. A. Van Westen, 252.
- Hydrology:** International Society of Medical —. 33.
- p*-Hydroxybenzaldehyde:** Menthone as reagent for —. 486.
- o*, *m* and *p*-Hydroxybenzoic Acids:** Identification of —. F. F. Blicke and F. D. Smith, 487.
- Hydroxy-Methyl Furfural** in honey; Tests for —. 381.
- 8-Hydroxyquinoline:** Separation of aluminium by —. G. E. F. Lundell and H. B. Knowles, 770.
- o*-Hydroxyquinoline** as reagent for separating beryllium from aluminium, iron and copper. M. Niessner, 434.
- Hygroscopic moisture** in coals; Determination of —. H. Löffler, 433.
- Hypervitaminosis** and vitamin "balance." L. J. Harris and T. Moore, 249.
- Hypochlorite** content of solutions; Use of potassium iodate in back titration for determining —. J. R. Lewis and R. F. Klockow, 123.
- Hypophosphorous Acid:** Precipitation of arsenic by —. 523.

I

- Ice Cream:** 661.
- Illinium:** Atomic weight of —. 296.
- Indian ephedras.** Their extraction and assay. S. Krishna and T. P. Ghose, 297.
- Indian Relish:** Boron compounds in —. 18.
- Indicator:** 2,6-dichlorophenol indiphenol as a reduction — in the examination of food-stuffs. J. Tillmans, P. Hirsch and E. Reinshagen, 176.
 Reaction of resorcinol and a new coloured —. L. Bey and M. Faillebin, 561.
 Universal — which gives colours of the spectrum over a PH range of 3 to 11.5. H. W. Van Urk, 254.
- Indicators:** Colour — for permanganate titrations. (a) Determination of ferrocyanide. J. Knop, 437; (b) Determination of iron. J. Knop and O. Kubelkova, 437.
- Indium:** Atomic weight of —. 295.
 Separation of gallium from —. 367.
- Indole** in bacterial cultures; Quantitative determination of —. H. B. Pierce and R. B. Kilborn, 251.
- Industrial Carbon.** (Review), C. L. Mantell, 622.
 Chemistry; Hydrogen Ions—Their Determination and Importance in Pure and —. (Review), H. T. S. Britton, 687.
 diseases. (Report of the Chief Inspector for Factories and Workshops, 1928). 745.
- Industry:** Law and —. G. S. W. Marlow, 692.
 Silicosis in — in Britain. E. L. Middleton, 757.
- Ink writing;** * Use of mercury vapour lamp in detecting bleached —. 545.

- Inorganic analysis**, Abstracts: 63, 122, 189, 254, 306, 365, 434, 488, 562, 617, 678, 768.
- Chemistry**; **A**: Comprehensive Treatise on Theoretical and —. Vol. IX. (Review), J. W. Mellor, 377.
- compounds; Determination of cadmium in organic and —. H. ter Meulen and H. J. Ravenswaay, 190.
- compounds; Determination of small quantities of mercury in presence of —. R. Robinson, 145.
- Quantitative Analysis**. H. A. Fales, 314, 502.
- Insect oils**. M. Tsujimoto, 305.
- oils; Action of bromine on —. J. Timon-David, 433.
- Insecticidal value and determination of pyrethrin I and II in *Pyrethrum cinerariaefolium***. I. F. Tattersfield and R. P. Hobson, 351.
- Insecticides containing fluorine compounds**; Analysis of —. L. Hart, 621.
- Valuation of —. C. H. Peet, 49.
- Insulators**: Heat —. (Food Investigation Report No. 35.) 743.
- Intermediates**: Determination of nitrogen by the Kjeldahl method, applied to the analysis of colouring matters and —. P. Sisley and M. David, 434.
- International Society of Medical Hydrology**, 33.
- standard measurements for mineral water analysis. 33.
- temperature scale. 292.
- Invertase from honey**. P. E. Papadakis, 669.
- Iodate**: Volumetric determinations by —. A. Schwicker, 493.
- Iodide method for copper**; Modification of Low's —. H. F. Bradley, 63.
- Iodides**: Micro-titration of — in absence or in presence of large proportions of nitrite. J. F. Reith, 371.
- Iodimetric determination of chromium (chromic oxide) in chrome alum**. J. E. S. Han, 307.
- determination of thiocyanates. A. Schwicker, 493.
- Iodine absorption**; The Wijs method as the standard for —. J. J. A. Wijs, 12.
- Atomic weight of —. 295.
- Determination of thio-semi-carbazide by means of —. A. Gaffre, 188.
- distribution; The potato as an index of —. R. E. Remington, F. B. Culp and H. von Kolnitz, 760.
- in organic combinations, especially in thyroid gland; Determination of —. W. Smith, 45.
- in organic matter; Determination of — (halogen). J. Schwaibold, 185.
- in vegetables; Determination of traces of —. J. F. McClendon and R. E. Remington, 239.
- Tincture of — and solution of —. (Legal Notes), 470.
- Iodine Chloride solutions**; Action of — on fatty acids with conjugated double linkings. Determination of the iodine value. E. T. Gelber and J. Böeseken, 305. *
- Iodine Solution**: 539.
- Iodine Value**: Determination of the —. II. Action of iodine chloride solutions on fatty acids with conjugated double linkings. E. T. Gelber and J. Böeseken, 305.
- of Spanish paprika oil. L. C. Mitchell and S. Alfend, 44.
- Ionone**: Determination of —. R. D. Hendriksz and A. Reclaire, 122.
- Iridium**: Atomic weight of —. 296.
- Irish winter butter**; Composition of —. P. Arup, 634.
- Iron**: Atomic weight of —. 295.
- copper in presence of —; Detection of. L. Szebellédy, 63.
- Determination of —. Colour indicators for permanganate titrations. J. Knop and O. Kubelkova, 437.
- in nutrition. IX. Further proof that the anaemia produced on diets of whole milk and iron is due to a deficiency of copper. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
- Iodimetric determination of —. E. C. Grey, 256.
- mercury in presence of —; Determination of. 150.
- reagents in the detection and differentiation of phenols. A. H. Ware, 58.
- Separation of beryllium from — by hydroxyquinoline. M. Niessner, 434.
- Separation of gallium from —. 367.
- Iron Carbonyl**: Determination of —. R. H. Griffith and G. C. Holliday, 62.
- Irradiated milk**; Therapeutic value of — in the treatment of rickets. C. Watson, T. Y. Finlay, and J. B. King, 673.
- Irradiation**: Ultra-violet —. See **Ultra Violet**.
- Isatin**: Menthone as reagent for —. 486.
- Isocarbon**: Test for —. 59.
- Isogitoxigenin and gitoxigenin**. The digitalis glucosides. W. A. Jacobs and E. L. Gustus, 425.
- Isopropyl Alcohol**: Analysis of mixtures containing acetone, ethyl alcohol and —. C. A. Adams and J. R. Nicholls, 2.
- Detection and colorimetric determination of —. 6.
- in cosmetics; Determination of — by means of piperonal. G. Reif, 552.
- Oxidation of —. 7.
- Isovaleraldehyde**: Menthone as reagent for —. 486.

Jaffe's Reaction for creatinine; Chemistry of —. V. Isolation of the red compound. I. Greenwald, 60.

Jalap: Assay of —. L. E. Warren, 608.

Japanese acid clay; Genesis of —. K. Kobayashi and K. Yamamoto, 562.

acid clay; Synthesis of —. N. Kameyama and S. Oka, 65.

acid clay; Synthetic —. N. Kameyama and S. Oka, 562.

Japanese—*continued*.

acid clay; The benzidine colour reaction of —. N. Kameyama and S. Oka, 562.
allanite; Analysis of —. Y. Minami, 682.
ginger. L. Rosenthaler, 751.

Japans: cobalt in —; Determination of. O. Heim, 464.

Jellies: Manufacture of fruit —. 596.

K

Ketchup: Boron compounds in tomato —. 18.

Ketones: Micro-method for determining semicarbazones and its application to the analysis of —. R. P. Hobson, 562.

Kingston-upon-Hull: Annual Report of the Public Analyst and Bacteriologist for the City and County of — for the year 1928. A. R. Tankard, 661.

Average composition of milk in City of —. 467.

Kjeldahl method: Determination of nitrogen by —, applied to the analysis of colouring matters and intermediates. P. Sisley and M. David, 434.

Kratom eating in Siam. 475.

Kreis rancidity reaction; Quantitative examination of the —. J. Pritzker and R. Jungkunz, 547.

reaction as a method for detecting incipient rancidity in cacao butter. T. H. Cooke, 411.

Krypton: Atomic weight of —. 295.

Kullan Nut Oil: 750.

L

Laboratory ozoniser. A. L. Henne, 685.

Lacquers: Accelerated exposure test for varnishes and —. H. V. Hansen, 192.

Lactic Aldehyde: Menthone as reagent for —. 486.

Laevulose: Metabolism of —, with a colorimetric method for its determination in blood and urine. R. C. Corley, 180.

Lamp: Mercury vapour — in use for criminal investigations. 545.

Lancaster: Annual Report of the County Analyst for the year 1928. G. D. Elsdon, 465.

Average composition of milk in County of —. 467.

Lanthanum: Atomic weight of —. 295.

Lard: Examination of — in ultra-violet light. F. Weiss, 178.

Luminescence of a genuine Dutch — in ultra-violet light. A. Van Druuten, 347.

Lauric Acid: Detection of coconut oil and palm kernel oil by means of a test for —. J. Grossfeld and A. Miermeister, 242.
in alcoholic beverages; Detection and determination of —. J. Grossfeld and A. Miermeister, 108.

Law and Industry. G. S. W. Marlow, 692.

Lawrence Smith method of determining alkalis modified. 224.

Lead: Antimony in lead alloys and — determined by means of sodium hydrosulphite. 398.

Atomic weight of —. 296.

Determination of small quantities of —, with special reference to urine and biological materials. A. G. Francis, C. O. Harvey and J. L. Buchan, 725.

Electrolytic separation of bismuth and — with controlled potential. E. M. Collin, 654.

Indirect determination of —. Oxidation of hydrogen peroxide by ceric sulphate. N. H. Furman and J. H. Wallace, 490.

in red glaze. A. Gronover and E. Wöhnlich, 552.

in soda water. 747.

in urine; Electrolytic determination of —. T. Cooksey and S. G. Walton, 97.

in urine; Excretion of —. H. Millet, 610.

New method for separating bismuth and —. Frick and Engemann, 617.

paints; Determination of chromium oxide (CrO) in —. E. J. Davis, 621.

poisoning in industry. 745.

Precipitation of — by *o*-oxyquinoline. V. Marsson and L. W. Haase, 122.

Separation of bismuth and —. H. Blumenthal, 679.

Separation of cadmium from — by means of sodium hydrosulphite. 400.

sulphur in galena and —; Determination of. H. Leysaht, 489.

Lead Arsenate in cabbages. 747.

Lead Ethyl Petrol: Committee of Enquiry on —. Method of lead determination devised for. 725.

Leather: fat in —; Determination of. D. Woodroffe, 188.

Leathers: English bookbinding —. R. W. Frey, L. R. Leinbach and E. O. Reed, 364.

Leaves: Vitamin *A* content in relation to size of —. L. McLaughlin, 764.

Leeds: Report of the City Analyst for the City of — for the third quarter of 1928. C.H. Manley, 103; for the second and third quarters, 1929. C. H. Manley, 739.

Legal Cases: Preston *v.* Jackson. (Artificial Vinegar), 32.

Pure Milk & Cream Co., Ltd. (Artificial Cream), 542, 594.

Legal Notes: 32, 105, 156, 232, 288, 338, 418, 469, 540, 593, 663, 742.

Lehmann Method for determining aniline. A. V. Pamfilov and V. E. Kisseleva, 60.

Leicester: Official appointment of Public Analyst for County Borough of —. 332.

Lemon juice; Boron compounds in —. 17.

Lemon Cheese: "Home made" —. (Legal Notes), 105.

Life: Aspects of Age, — and Disease. Sir H. Rolleston, 130.

Lignoceric Acid: Oxidation of —. F. A. Taylor and P. A. Levene, 113.

- Lime** content of quicklimes; Fineness and available —. J. S. Rogers, 190.
requirements of soils; Rapid electrometric method for measuring —. F. Hardy and A. H. Lewis, 184.
- Linolenic Acid**: Analysis by means of the thiocyanogen value of fats containing —. Analysis of linseed oil. H. P. Kaufmann and M. Keller, 304.
- Linseed Meal**: Manganese in —. 348.
- Linseed Oil**: Analysis of —. Analysis by means of the thiocyanogen value of fats containing linolenic acid. H. P. Kaufmann and M. Keller, 304.
Film characteristics of the esters of the component fatty acids of —. B. H. Thurman and W. R. Crandall, 186.
Halogen absorption of —. 446.
- Lipids**: liver —; Highly unsaturated fatty acid of. Preparation of arachidonic acid. J. B. Brown, 113.
- Lipoidal phosphorus** in blood; Colorimetric method for determining —. S. L. Leiboff, 50.
- Lithium**: Atomic weight of —. 295.
Influence of — upon the detection of potassium by zirconium sulphate. R. D. Reed and J. R. Withrow, 370.
Separation of — from potassium, sodium and magnesium. L. Moser and K. Schutt, 370.
- Liver** extracts for pernicious anaemia; Examination of —. 597.
lipids; Highly unsaturated fatty acid of —. Preparation of arachidonic acid. J. B. Brown, 113.
- Liver Oils**: Vitamin A content of the unsaponifiable matter of —. I. S. Meno, M. Yamashita and Y. Ota, 54.
- Liverpool**: Average composition of milk in City of —. 467.
- Locust Oil**: 306.
- Low's** short iodide method for copper; Modification of —. H. F. Bradley, 63.
- Lumbang Oil**: Malayan —. T. H. Barry, 677.
- Luminescence** of a genuine Dutch lard in ultraviolet light. A. Van Druten, 347.
of creatinine. G. Reif, 757.
- Lunge and Keane's** Technical Methods of Chemical Analysis. 2nd Ed. Edited by C. A. Keane and P. C. L. Thorne. (Review), 66.
- Lutecium**: Atomic weight of —. 296.
- M**
- Magnesia**: Definition of —. 468.
- Magnesium**: Atomic weight of —. 295.
Influence of — upon the detection of potassium by zirconium sulphate. R. D. Reed and J. R. Withrow, 370.
Oxalate method of separating calcium and —. W. T. Hall, 65.
Sensitive test for —. W. L. Ruigh, 489.
- Magnesium**—continued.
Separation of beryllium from —. 366.
Separation of lithium from —. L. Moser and K. Schutt, 370.
- Maize Oil**: Halogen absorption of —. 446.
- Malaria**: Radion Alfa, a proprietary remedy for —. 290.
- Malay lumbang oil**. T. H. Barry, 677.
- Maleic Acid**: Halogen absorption of —. 448.
- Malonaldehyde**: Menthone as reagent for —. 486.
- Manganese**: Atomic weight of —. 295.
in foodstuffs. C. Newcomb and G. Sankaran, 348.
Separation of beryllium from —. 367.
Storage of copper and — in the animal body and its influence on haemoglobin building. R. W. Titus and J. S. Hughes, 609.
Volumetric determination of — as dioxide. I. M. Kolthoff and E. B. Sandell, 769.
- Margarine**: salt in butter and —; Routine determination of. P. Arup, 658.
vitamin A in —; Test for. A. Andersen and E. Nightingale, 481.
water in —; Standard for. (Legal Notes), 232.
- Marine** animal oils. Oil of *Centrophorus Granulosus*. E. André and H. Canal, 606.
animals; Sterols from muscular tissue of —. 36, 37.
- Masurium**: Atomic weight of —. 295.
- Mayonnaise** salad dressing; Standard for —. 107.
- Meal**: hoof —; Determination of. W. F. Sterling, 303.
- Meat**: Albuminous compounds from — of different animals. K. Beck and E. Caspar, 238.
Food Investigation Board Report on —. 35.
Preservative in —. Refusal of warranty by wholesaler. (Legal Notes), 742.
Sulphur dioxide in —. Bullot process for preserving —. 601.
- Medical Hydrology**; International Society of —. 33.
Research; Report of the Federated Malay States Institute of — for 1927. 290.
- Medical Research Council**: Special Report No. 128. Toxicity tests for novarsenobenzene (neosalvarsan). E. H. Durham, J. H. Gaddum and J. E. Marchal, 667.
- Medicinal** preparations containing mercury; Quantitative analysis of certain —. A. Jonescu-Matiu and A. Popesco, 609.
- Medicine**: Chemistry in —. (Review), 312.
Colloid Chemistry, Vol. II. Biology and —. (Review), Ed. by J. Alexander, 263.
- Medicines**: Nitrobenzaldehyde as reagent for organic —. H. W. Van Urk, 424.
Proprietary —. 742.
- Melecitose** in linden dew honey. F. E. Nottbohm and F. Lucius, 670.
- Melting Point** apparatus; New —. F. Kerchow, 309.
- Meniscus** corrections involved in the calibration of graduated tubes. A. More, 630.

- Menthone** as a reagent for aldehydes. D. Vorländer, 485.
- Mercaptans** in naphtha; Determination of —. P. Borgstrom and E. E. Reid, 767.
- Mercologia**: Dizionario di — e di Chimica Applicata. Vol. I. 5th Ed. G. V. Villavecchia, 502.
- Merchandise Marks**: Statutory Rules and Orders, 1928, No. 571, 167; No. 1052, 169.
- Mercurous Tungstate**: Precipitation of tungsten as —. V. Spitzin, 123.
- Mercury**: Atomic weight of —, 296.
in body fluids and tissues; Electrolytic method for determining small amounts of —. A. G. Young and F. H. L. Taylor, 759.
in presence of copper, iron and zinc; Determination of —, 150.
in presence of organic and inorganic compounds; Determination of small quantities of —. R. Robinson, 145.
poisoning in industry. 745.
Quantitative analysis of certain medicinal preparations containing —. A. Jonescu-Matiu and A. Popesco, 609.
Rapid determination of cadmium and —. G. Spacu and G. Suci, 618.
Rapid microchemical determination of copper and —. (a) G. Spacu and J. Dick; (b) G. Spacu and G. Suci, 768.
Volumetric determination of —. H. B. Dunncliff and H. D. Suri, 405.
- Mercury Vapour Lamp**: Testing seeds, etc., under the quartz —. A. Niethammer, 563.
Uses of — in criminal investigation. 545.
- Merthyr Tydfil**: Official appointment of Agricultural Analyst for County Borough of —, 536.
- Mesaconic Acid**: Isolation of — from cabbage leaves. H. W. Buston, 239.
- Metabolism** of laevulose, with a colorimetric method for its determination in blood and urine. R. C. Corley, 180.
- Metals**: Qualitative analysis of — by means of the Fery spectroscope. 546.
Use of phenolic acids in detecting, separating and determining —. I. Separation of group 2A —. P. N. Das-Gupta, 678.
- Meteorological Office**: Air Ministry. Changes of zero in spirit thermometers. 291.
- Methaemoglobin**: Gasometric determination of —. D. D. Van Slyke and A. Hiller, 760.
- Methanol**: Tests for —. H. Leffmann and C. C. Pines, 671.
- Methyl Chloride** poisoning. Kegel, McNally and Pope, 676.
- Methyl Protocatechuic Aldehyde**: Comparative study of ethyl and —. L. Klotz, 752.
- β -Methyl-Umbelliferone** as a fluorescent indicator. C. Bülow and W. Dick, 63.
- Methylene Blue**: Quantitative determination of —. M. François and L. Sequin, 551.
- Methylglyoxaldehyde**: Menthone as reagent for —. 486.
- Mice**: Effect of nicotine upon white —. C. H. Thienes, 359.
- Micro Analysis** of cobalt; Colorimetric method for —. L. Michaelis and S. Yamaguchi, 620.
- Micro-Determination** of carbon by use of chromic acid oxidation. A. Boivin, 117.
of molybdenum; Gravimetric method for the —. J. B. Niederl and E. P. Silbert, 256.
of selenium and tellurium in organic compounds. H. D. K. Drew and C. R. Porter, 683.
- Micro-Method** for determining semicarbazones and its application to the analysis of ketones. R. P. Hobson, 562.
for determining the total creatinine in muscle. S. Ochoa and J. G. Valdecasas, 247.
- Micro-Organisms** in a suspension; Rapid and accurate method for determining the quantity of yeast and —. R. J. Williams, E. D. McAlister and R. R. Roehm, 613.
- Micro Time Method** for determining reducing sugars, and its application to analysis of urine and blood. J. A. Hawkins, 750.
- Micro-Titration** of iodides, in absence or in presence of large proportions of nitrite. J. F. Reith, 371.
- Microchemical** distinctions of essential oils. L. Rosenthaler, 362.
reactions of homatropine. M. Wagenaar, 47.
reactions of physostigmine. M. Wagenaar, 424.
reactions of piperine. M. Wagenaar, 424.
reactions of theobromine. M. Wagenaar, 244.
reagent for alkaloids, etc.; Beta-anthraquinone-monosulphonic acid as a —. L. Rosenthaler, 351.
- Microcrystallography**: Identification of yohimbine by —. G. Denigès, 179.
- Microscopical** examination; New method of mounting vegetable powders for —. W. O. Howarth, 494.
- Mianda Seed Oil**: 750.
- Milch**: Refraktometrische Untersuchung der —. (Review), E. Reiss, 127.
- Milk**: Abnormal —. 740.
acidity and freezing point of —; Investigation on the relations between the. A. J. Parker and L. S. Spackman, 217.
added water in —; Cryoscopic method for detecting. R. L. Andrew, 210.
Anaemia produced on diets of whole — and iron proved to be due to deficiency of copper. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
antirachitic vitamin in different samples of butter, cod-liver oil and —; Variations in amounts of. K. H. Coward, 302.
Average composition of —. 467.
Bacteriological tests for graded —. Ministry of Health Report. 235.
Boric acid in —. 649.
copper content of —; Effect of diet on. C. A. Elvehjem, H. Steenbock and E. B. Hart, 555.

- Milk**—*continued*.
 cheese. (Legal Notes), 540.
 Effect of heat on —. (a) On the coagulability by rennet, and (b) on the nitrogen, phosphorus and calcium contents. E. C. V. Mattick and H. S. Hallett, 557.
 Factors affecting the yield and quality of —.
 I. The age of the cow. R. R. Kay and H. C. McCandlish, 353.
 Freezing point of —. A. Van Raalte, 266.
 Goats' —. 593.
 Goats' —, boiled and unboiled. 104.
 Goats' — examined for unboiled —. A. G. Holborow, 658.
 heating of —; Tests for the degree of. P. Weinstein, 237.
 irradiated-; Therapeutic value of — in the treatment of rickets. C. Watson, T. Y. Finlay and J. B. King, 673.
 Manganese in —. 348.
 samples examined for tubercle bacilli. 231.
 secretion; Studies in — based on the variations and yields of milk and butter fat produced at morning and evening milkings. S. Bartlett, 179.
 Variations in the composition of —. Society of Public Analysts' letter to the Ministry of Agriculture and Fisheries, 472.
- Milks** low in solids-not-fat; Refraction of —. G. D. Elsdon and J. R. Stubbs, 318.
- Mince Meat**; Boron compounds in —. 18.
- Mineral Water** analysis; International standard measurements for —. 33.
- Mineral Waters**: Silica in —. P. Hefferman, 686.
- Ministry of Agriculture and Fisheries**: Egg preservation and the registration of premises. 746.
 Fertilisers and Feeding Stuffs Act, 1926. 344.
 Report on mussel purification. R. W. Dodgson, 158.
 Society of Public Analysts' letter to — on "Variations in the composition of milk." 472.
- Ministry of Health Reports, Circulars, etc.**:
 Artificial Cream Act, 1929 (No. 989). 344.
 Bacteriological tests for graded milk. 235.
- Miscometer**: An improved —. J. Houston, 30.
- Molasses**: Some organic acids of sugar cane —. E. K. Durham, 670.
- Molecular Rearrangements**. (Review), C. W. Porter, 261.
- Molecules**: Polar —. P. Debye, 380.
- Molybdenum**: Atomic weight of —. 295.
 Gravimetric method for the micro determination of —. J. B. Niederl and E. P. Silbert, 156.
- Molybdic Acid** as a precipitant for blood proteins. S. R. Benedict and E. B. Newton, 428.
- Monier-Williams Method** for determining sulphurous acid in food products; Comparison of the A.O.A.C. and —. J. Fitelson, 297.
- Monobromoguaiaicol Carbonate**: Determination of guaiaicol carbonate. L. H. Chernoff, 756.
- Monosodium Glutamate** as a chemical condiment. J. E. S. Han, 751.
- Morphine**: Chlorodyne B.P.'85 without —. (Legal Notes), 543.
 Determination of —. A. K. Balls and W. A. Wolff, 111.
- Mosquito** breeding; Composition of water and —. W. Rudolfs and J. B. Lackey, 495.
- Moths**: Protection of animal fibres against clothes — and dermestid beetles. C. O. Clarke, 126.
- Muscetals**: Boron compounds in —. 16.
- Muscle**: creatinine in —; Micro method for determining the total. S. Ochoa and J. G. Valdecasas, 247.
 volatile sulphide from —; Note on, W. A. Osborne, 51.
- Muscles**: Creatine content of the — and some other tissues in fishes. A. Hunter, 299.
- Mussel** purification; Report on —. R. W. Dodgson, 158.
- Must**: sucrose in wine and —; Occurrence of. C. von der Heide and H. Mändlen, 355.
- Mustard** and prepared —. 662.
- Mustard Oil**: Microchemical distinction of —. 363.
- Müller and Rudolph's** method for the electro-metric determination of copper. M. E. Pring and J. F. Spencer, 509.
- Mutton** tallow; Component glycerides of a —. G. Collin, T. P. Hilditch and C. H. Lea, 243.
- Mycosterols**: Biological inertness of irradiated — other than ergosterol. O. Rosenheim and T. A. Webster, 248.
- Mydriatic** alkaloids; Formula for calculating composition of mixtures of —. J. C. Munch and G. S. Gittinger, 47.
- Myristic Acid**: Lauric acid in presence of —. 108.
- Myrrh**: Tincture of —. Condemned samples. 31.

N

- Naphtha**: mercaptans in —; Determination of. P. Borgstrom and E. E. Reid, 767.
- Naradjada** bark. 753.
- Narceine**: Impurity in commercial — which gives a colour reaction with sodium nitroprusside. J. J. L. Zwikker, 425.
- National Physical Laboratory**: Report of the — for the year 1928. 340.
- Navy Bean**: Plant haemogglutinins with special reference to a preparation from the —. V. R. Goddard and L. B. Mendel, 429.
- Neatsfoot Oil**: The cold test for —. A. C. Orthmann and W. J. Arner, 119.
- Neodymium**: Atomic weight of —. 296.
- Neon**: Atomic weight of —. 295.
 in natural gases; Quantitative determination of —. N. P. Pétcheff, 617.
- Neosalvarsan**: Toxicity tests for —. Medical Research Council Special Report No. 128. E. H. Durham, J. H. Gaddum and J. E. Marchal, 667.
- Nephelometric** determination of pepsin. C. G. Van Arkel, 762.

- Nephelometry**: Photometric Chemical Analysis. Vol. II. —. (Review), J. H. Yoe and H. Kleinmann, 564.
- New South Wales**: Annual Report of the Government Analyst for the year 1928. T. Cooksey, 597. Appendix. 601.
- New Zealand butters**; The fatty acids and component glycerides of some —. T. P. Hilditch and E. E. Jones, 75, 152.
- Report of the Dominion Analyst for the year 1927. J. S. Maclairin, 289.
- Nickel**: Atomic weight of —. 295.
- in steel; Determination of small amounts of —. B. Jones, 582.
- Separation of beryllium from —. 367.
- Nicotine**: Effect of — upon white mice. C. H. Thienes, 359.
- in tobacco; Determination of "free —." Apparent dissociation constants of —. H. B. Vickery and G. W. Pucher, 754.
- Niobium**: Atomic weight of —. 295.
- Investigations into the analytical chemistry of tantalum, — and their mineral associates. XIV. A new method for separating small quantities of tantalum and — from titanium. W. R. Schoeller and C. Jahn, 320.
- XV. New method for separating tantalum and — from titanium and zirconium. W. R. Schoeller, 453. XVI. Observations on tartaric hydrolysis. XVII. Quantitative precipitation of the earth acids and certain other oxides from tartrate solution. W. R. Schoeller and H. W. Webb, 704.
- Nitron**: Atomic weight of —. 296.
- Nitrate Nitrogen** in soils and plant tissues; Chlorate method for determining —. E. M. Emmert, 491.
- Nitrate Nitrogen** in tobacco; Determination of —. H. B. Vickery and G. W. Pucher, 608.
- Nitrates** in bismuth carbonate; Determination of —. G. J. W. Ferrey, 756.
- in soil and waters; Pyrogallol method for determining —. L. U. De Nardo, 360.
- Nitre**: spirit of —; Analysis of. L. Van Italie, A. J. Steenhauer and A. Harmsma, 244.
- Nitrite**: Micro-titration of iodides, in absence or presence of large proportions of —. J. F. Reith, 371.
- Nitrobenzaldehyde** as reagent for organic medicines. H. W. Van Urk, 424.
- Nitrogen**: Atmospheric —; Fixation of. (Review), F. A. Ernst, 195.
- Atomic weight of —. 295.
- content of milk; Effect of heat on —. E. C. V. Mattick and H. S. Hallett, 557.
- Determination of — by the Kjeldahl method, applied to the analysis of colouring matters and intermediates. P. Sisley and M. David, 434.
- in plant materials; Determination of small quantities of —. J. T. Sullivan and L. E. Horat, 303.
- in soils and plant tissues; Chlorate method for determining nitrate — and total —. E. M. Emmert, 491.
- Nitroglycerin**: Poisoning by —. (Parliamentary Notes), 165.
- 6-Nitroquinoline**: Determination of palladium by —. S. C. Ogburn and A. H. Riesmeyer, 63.
- Nitroso-Compounds**: Bactericidal action of the —. E. A. Cooper and R. B. Haines, 357.
- Nitrous Acid**: Reactions of dyestuffs with —. J. V. Dubsý and A. Okáč, 60.
- Nomogram** for converting observed volumes of gas to normal temperature and pressure. J. H. Coste, 656.
- Non-Alcoholic** products sold as ginger brandy, and orange and quinine wine. (Legal Notes), 288.
- Northampton**: Official appointment of Additional Public Analyst for County of —. 332.
- Novarsenobenzene**: Toxicity tests for —. Medical Research Council Special Report No. 128. E. H. Durham, J. H. Gaddum and J. E. Marchal, 667.
- Nutria fur**; Characteristics of —. 696.
- Nutrition**: Iron in —. IX. Further proof that the anaemia produced on diets of whole milk and iron is due to a deficiency of copper. J. Waddell, H. Steenbock, C. A. Elvehjem, and E. B. Hart, 556.
- Nutritive** value of proteins; Note on quantitative methods of measurement of the —. H. H. Mitchell, 47.

O

- Oat** products; Marking of — under the Merchandise Marks Act, 1928. 171.
- Oatmeal kernel**; Manganese in —. 348.
- Obituary Notices**:
Blunt, Thomas Porter, 132.
Gray, George Watson, 265.
Jenkins, John Howard Brown, 1, 73.
Knights, James West, 74, 133.
Rideal, Samuel, 694.
- Oenanthaldehyde**: Menthone as reagent for —. 486.
- Oil**: Fish —. See **Fish Oil**.
- mixtures; New procedure for the separation of alcohols and phenols from —. H. Schmidt, 57.
- seed; Castanha de Arara nuts: a new Brazilian —. 177.
- Oils**: Differential halogen absorption of fats and —. J. W. Croxford, 445.
- Essential —. See **Essential Oils**.
- Fatty —. See **Fatty Oils**.
- Fish —. See **Fish Oils**.
- Insect —. M. Tsumimoto, 305.
- Luminescence of fats and —. A. van Raalte, 110.
- Marine animal —. Oil of *Centrophorus Granulosus*. E. André and H. Canal, 606.
- sulphonated-; Determination of neutral fat in —. R. Hart, 306.
- sulphonated —; Determination of neutral oil in. Committee Report. G. W. Priest, 118.

- Oleic Acid**: Halogen absorption of —. 448.
- Olive Oil**: Halogen absorption of —. 446.
Manganese in —. 348.
Ultra-violet light as means of detecting refined oil in virgin —. S. Musher and C. E. Willoughby, 672.
- Olive Oils**: Fachini's reaction for detecting residue —. R. Marcille, 346.
- Oncoba Echinata**: Gorli oil from —. 607.
- Onion**: Manganese in —. 348.
scales; Isolation of protocatechuic acid from pigmented —. K. P. Link, H. R. Angell and J. C. Walker, 240.
- Opossum fur**: Characteristics of —. 696.
- Orange cordials**. 748.
juice; Boron compounds in —. 17.
- Orange and Quinine Wine**: Non-alcoholic products sold as —. (Legal Notes), 288.
- Orange Quinine Wine**: (Legal Notes), 339.
- Oranges**: Boric acid in —. J. T. Dunn and H. C. L. Bloxam, 28.
Keeping properties of —. 35.
- Ores**: tungsten in —; Rapid test for. A. Petrovsky, 490.
- Organic acids of sugar cane molasses**. E. K. Nelson, 670.
analysis; Abstracts: 57, 117, 185, 252, 304, 361, 433, 485, 561, 614, 677, 767.
bases as reagents for separating titanium and beryllium. 269.
carbon in soils; Determination of —. G. W. Robinson, W. McLean and R. Williams, 360.
Chemistry; An Introduction to Modern —. L. A. Coles, 502.
combinations; Determination of iodine in —. W. Smith, 45.
compounds; Determination of cadmium in inorganic and —. H. ter Meulen and H. J. Ravenswaay, 190.
compounds; Determination of small quantities of mercury in presence of —. R. Robinson, 145.
compounds; Micro-determination of selenium and tellurium in —. H. D. K. Drew and C. H. Porter, 683.
compounds; Quantitative analysis of tin in —. H. Gilman and W. B. King, 365.
Crystal; Structure of an —. Sir W. H. Bragg, 130.
matter; Determination of iodine (halogen) in —. J. Schwaibold, 185.
medicines; Nitrobenzaldehyde as reagent for —. H. W. Van Urk, 424.
peroxides; Determination of —. S. Marks and R. S. Morrell, 503.
Syntheses. Vols. VIII and IX. (Review), R. Adams and J. B. Conant, 443.
- Organischen** Qualitativen Analyse; Anleitung zur —. H. Staudinger, 502.
- Organism**: copper in the —; Some physiological aspects of. F. B. Flinn and J. M. Inouye, 758.
- Organisms** in water; Determination of the number of —. W. Plücker and W. Bartels, 56.
- Organo-Metallic Compounds**: Qualitative colour test for reactive —. H. Gilman and L. L. Heck, 186.
- Organs**: Distribution of bismuth in — after injection of aqueous solutions. R. Fabre and M. Picon, 252.
- Orthophosphate**: Simultaneous determination of pyrophosphate and —. R. Dworzak and W. Reich-Rohrwig, 435; W. Stollenwerk and A. Bäurle, 435.
- Osmium**: Atomic weight of —. 296.
- Osmotic concentration**; Difference in — between yolk and white of egg. J. Straub, 296.
- Otto of Rose**: Freezing point of —. 337.
- Oxalate** method for separating calcium and magnesium. W. T. Hall, 65.
- Oxalate-Salicylate** method for small quantities of earth acids. 322.
- Oxford**: Official appointment of Additional Public Analyst for the County of —. 536.
- Oxidation**: quantitative — with ceric sulphate; Experiments on. A. J. Berry, 461.
reactions of aldehydes; New —. J. B. Conant and J. G. Aston, 57.
- Oxidising agent**; Ceric sulphate as a volumetric —. VIII. Determination of chromium. H. H. Willard and P. Young, 190.
- Oxygen**: Absorption of — by alkaline pyrogallol. T. J. Drakeley and H. Nicol, 306.
Atomic weight of —. 295.
- Oxymel of Squill**: 156.
- Oxymethylfurfural** in honey and artificial honey; Quantitative determination of —. J. Fiehe and W. Kordatzki, 241.
in honey; Quantitative determination of —. J. Fiehe, 108.
- o-Oxyquinoline**: Precipitation of lead by —. V. Marsson and L. W. Haase, 122.
- Oxytocic** activity of commercial samples of pituitary extract; Comparison of the pressor, anti-diuretic and —. U. G. Bijlsma, J. H. Burn and J. H. Gaddum, 298.
- Ozone** in air; New method for quantitative determination of —. M. S. Egorow, 189.
Use of — for determining the constitution of unsaturated compounds. J. Doeuvre, 361.
- Ozoniser**: A laboratory —. A. L. Henne, 685.

P

- Packing** for rindless cheese; Tin-foil as —. Elten, —. 552.
- Paints**: Aniline dyes in —. 748.
chromium oxide (CrO) in lead —; Determination of. E. J. Davis, 621.
- Palladium**: Atomic weight of —. 295.
Determination of — by 6-nitroquinoline. S. C. Ogburn and A. H. Riesmeyer, 63.
- Palm Kernel Oil**: Detection of — by means of a test for lauric acid. J. Grossfeld and A. Miermeister, 242.
- Palm Oil** from the Belgian Congo. G. S. Jamieson and R. S. McKinney, 477.

- Papain:** Action of — on the polarisation of gelatin. Measurement of proteolytic activity. H. C. Gore, 762.
- Paper Making;** Chemistry of Pulp and —. 2nd Ed. (Review), E. Sutermeister, 626.
- Paprika Oil:** Iodine value of Spanish —. L. C. Mitchell and S. Alfend, 44.
- Paraffin wax in dripping.** (Legal Notes), 33.
- Parasitism:** Vitamin *D* and resistance of chickens to —. J. E. Eckert and L. A. Spindler, 356.
- Parfums:** Plantes à — des Colonies Françaises. (Review), M. E. Maunier, 129.
- Parliamentary Notes:**
Artificial Cream Act, 1929. 341.
Chlorine Treatment of Flour. 165.
Expiring Laws Continuance Act, 1928. 42.
Poisoning by Nitroglycerin. 165.
- Parsley Seed Oil:** Halogen absorption of —. 448.
Thiocyanogen value of —. A. Steger and J. van Loon, 177.
- Pathology:** Handbook of Clinical Chemical —. (Review), F. S. Fowweather, 775.
- Peaches:** Boron compounds in dried —. 16.
- Pearl Barley:** Coating of —. 468.
- Pears:** Boron compounds in dried —. 16.
- Peas:** tetanus bacillus in canned —; Occurrence of. F. Marsh and J. Henderson, 536.
- Pecan Oil:** G. S. Jamieson and S. I. Gertler, 750.
- Pectic substances of plants;** Critical and historical study of —. Food Investigation Report No. 33. 594.
- Pectin:** Purification and determination of —. 595.
- Penzoldt test** for qualitative detection of acetone. 5.
- Pepper:** Adulterated —. (Legal Notes), 541. and — mixtures. 662.
Boron compounds in black —. 18. compound. (Legal Notes), 663.
Manganese in —. 348.
- Pepsin:** Nephelometric determination of —. C. G. Van Arkel, 762.
- Perchloric Acid** method of determining sulphur in rubber. E. Wolesensky, 61.
- Perfumes:** Cosmetics and Soaps. Vol. II. W. A. Poucher, 314.
primary phenylethyl alcohol in essential oils and mixtures of —; Identification of. S. Sabetay, 615.
- Permanganate** titration of antimony in white metal. A. Wassilieff and H. Stutzer, 620.
Titration of thalious salts with — in hydrochloric acid solution. A. Jilek and J. Lukas, 255.
titrations; Colour indicators for —. (a) Determination of ferrocyanide. J. Knop; (b) Determination of iron. J. Knop and O. Kubelkova, 437.
- Permutit:** Determination of ammonia and amide nitrogen in tobacco by the use of —. H. B. Vickery and G. W. Pucher, 550.
- Peroxides:** Determination of organic —. S. Marks and R. S. Morrell, 503.
- Peschianiki fur;** Characteristics of —. 696.
- Petrol:** Carbon deposit from ethyl —. 540.
- Petroleum:** Standard Methods of Testing — and its Products. 2nd Ed. (Review), 496.
sulphur in crude —; Volumetric determination of. G. Woodward, 616.
- Petroleum Spirit** test for purity of castor oil. T. T. Cocking, 548.
- Petroselinic Acid:** Halogen absorption of —. 448.
- P_a** range of 3 to 11.5; Universal indicator which gives the colours of the spectrum over a —. H. W. Van Urk, 254.
- Pharmaceutical preparations;** Determination of camphor in —. J. Bougault and Bl. Leroy, 46.
preparations; Determination of formaldehyde in certain —. O. Heim, 537.
- Pharmacology** of tetrachlorethylene. P. D. Lamson, B. H. Robbins and C. B. Ward, 358.
- Pharmacopoeia:** Arsenic test of the German —. G. Frerichs, 56.
- Phenol** in waste liquors; Two new methods for determining —. H. Dehe, 121.
- Phenolic Acids:** Use of — in detecting, separating and determining metals. I. Separation of Group 2A metals. P. N. Das-Gupta, 678.
- Phenols:** Decomposition of phenolsulphonic acids and purification of — by the sulphonic acid separation method. H. Bruckner, 189.
Determination of —. J. A. Shaw, 615.
Iron reagents in the detection and differentiation of —. A. H. Ware, 58.
separation of alcohols and — from oil mixtures; New procedure for. H. Schmidt, 57.
Tests for — involving the use of hydrogen peroxide. A. H. Ware, 561.
Use of aldehydes and di-hydroxy acetone in detecting and differentiating —. A. H. Ware, 614.
- Phenolsulphonic Acids:** Decomposition of — and purification of phenols by the sulphonic acid separation method. H. Bruckner, 189.
- Phenyl-Acetic Acid:** Cresyl esters of —. L. C. Raiford and J. G. Hildebrand, 616.
- p-Phenylenediamine:** New derivatives of — and their value as hair-dyes. H. Meyer, 675.
- Phenylethyl Alcohol** in essential oils and mixtures of perfumes; Identification of primary —. S. Sabetay, 615.
- β-Phenylethyl Alcohol:** Detection and identification of —. 253.
- Phenylhydrazine** as means of separating titanium from beryllium. 271.
- Philippine** starches; Photomicrographs of —. R. N. Allen, 686, 744.
- Phosphates:** Precipitation of zirconium by —. R. D. Reed and J. R. Withrow, 491.
- Phosphoric Acid:** Adsorption of — by stannic sulphide. R. Chandelle, 769.

Phosphoric Acid—*continued*.

in soil; Application of the strychnomolybdc method to the determination of —. C. Antoniani and S. Bonetti, 485.

Phosphoric Ion as a sensitive reagent. Differentiation of antimony and tin. T. G. Y. Arnal, 256.

Phosphorus: Atomic weight of —. 295. content of milk; Effect of heat on —. E. C. V. Mattick and H. S. Hallett, 557. lipoidal — in blood; Colorimetric method for determining. S. L. Leiboff, 50.

Photochemical action of various sterols. L. Hugouenq and E. Couture, 302. methods of testing sources of ultra-violet radiation. F. C. Hymas, 622.

Photometer: Cube — for comparing the whiteness of fabrics. A. Adderley, 684.

Photometric Chemical Analysis. Vol. I. Colorimetry. (Review), J. H. Yoe, 193. Vol. II. Nephelometry. (Review), J. H. Yoe and H. Kleinmann, 564.

Photometrical Processes. (Review), G. B. Kistiakowski, 127.

Photomicrographs of Philippine starches. R. N. Allen, 686, 744.

Physical constants of essential oils. 335.

Physical Laboratory: Report of the National — for the year 1928. 340.

Physical Methods: Abstracts: 65, 124, 191, 256, 309, 372, 493, 563, 622, 684, 771.

Physiological Chemistry; Practical —. 8th Ed. S. W. Cole (Review), 70.

Physostigmine: Microchemical reactions of —. M. Wagenaar, 424.

Picric Acid: Purification of — for creatinine determination. S. R. Benedict, 428.

Pigments: Distinction of — in ultra-violet light. M. J. Schoen and J. Rinse, 684. Quantitative changes in the chloroplast — in the peel of bananas during ripening. H. von Loesecke, 611.

Pilgrim Whale: Fatty oil of the —. Biological relations between the cholesterol and squalene. E. André and H. Canal, 605.

Piperazine in the analysis of urine and blood. R. Gros, 49.

Piperine: Microchemical reactions of —. M. Wagenaar, 424.

Piperonal as means of detecting isopropyl alcohol in cosmetics. G. Reif, 552.

Piperonaldehyde: Menthone as reagent for —. 486.

Pipette: Automatic —. A. Henderson and J. Roberts, 737. M. Hyman, 125.

Pilocarpine: Determination of —. P. Bourcet, 245.

Pituitary extract; Comparison of the oxytocic, pressor and anti-diuretic activities of commercial samples of —. U. G. Bijlsma, J. H. Burn and J. H. Gaddum, 298. powders; Bio-assay of commercial —. W. T. McClosky and J. C. Munch, 298.

Plant Biochemistry; Practical —. (Review), M. W. Onslow, 774.

Plant—*continued*.

foods; Copper content of animal and —. C. W. Lindow, C. A. Elvehjem and W. H. Peterson, 420.

growth; Importance of boron in —. E. S. Johnston, 48.

haemagglutinins with special reference to a preparation from the navy bean. V. R. Goddard and L. B. Mendel, 429.

materials; Determination of aluminium in —. O. B. Winter and O. D. Bird, 751.

materials; Determination of small quantities of nitrogen in —. J. T. Sullivan and L. E. Horat, 303.

Products; Introduction to the Chemistry of —. Vol. II. Metabolic Processes. (Review), P. Haas and T. G. Hill, 775.

tissue; Association of vitamin A with greenness in —. II. Vitamin A content of asparagus. J. W. Crist and M. Dye, 300.

tissues; Chlorate method for determining nitrate nitrogen, total nitrogen and other elements in —. E. M. Emmert, 491.

Plantes à Parfums des Colonies Françaises. (Review), M. E. Maunier, 129.

Plants: pectic substances of —; Critical and historical study of. Food Investigation Report No. 33. 594.

Platinibromide: Potassium determined as —. 226.

Platinised silica gels as catalysts for the oxidation of sulphur dioxide. H. N. Holmes, J. Ramsay and A. L. Elder, 771.

Platinum: Atomic weight of —. 296.

Poisoning: Benzene —. 600.

by arsenate of lead. 599.

by bitter-sweet (*Solanum Dulcamara*). H. Lowe, 153.

by hydrogen arsenide; Distribution of arsenic in a body in a fatal case of —. F. J. T. Grigg, 659.

by nitroglycerin. (Parliamentary Notes), 165. Carbon monoxide —. 600.

cases in Ceylon. 544.

in industry; Forms of —. 745.

Methyl chloride —. Kegel, McNally and Pope, 676.

Mussel —. 158.

Tetraodon (globe fish) —. 476.

Poisons and Powerful Drugs; Laboratory Manual for the Detection of —. (Review), W. Autenreith, 126.

Cellular toxicity of gaseous and volatile —. (Mme.) S. Lallemand, 359.

Polar Molecules. P. Debye, 380.

Pollution: Water —. See **Water**.

Polonium: Atomic weight of —. 296.

Polysulphides: sulphur in —; Volumetric determination of. P. Szeberényi, 621.

Pork: Antineuritic and water-soluble B vitamins in beef and —. R. Hoagland, 432.

Potassium: Atomic weight of —. 295.

detection of — by zirconium sulphate; Influence of lithium, rubidium, caesium and magnesium upon the. R. D. Reed and J. R. Withrow, 370.

- Potassium**—*continued*.
determined as platinibromide. 226.
in presence of ammonium salts; Detection of —. R. D. Reed and J. R. Withrow, 65.
in soil extracts; Cobaltinitrite volumetric method of determining —. G. Milne, 558.
Separation of lithium from —. L. Moser and K. Schutt, 370.
- Potassium Cyanate** as a reagent for the detection of cobalt. B. J. F. Dorrington and A. M. Ward, 327.
- Potassium Dichromate** test of Sanio for tannins. C. M. Fear, 227.
- Potassium Ferrocyanide**: Determination of purity of — by titration with zinc sulphate solution. Farbsalz-Gesellschaft, Berlin, 437.
- Potassium Iodate**: Use of — in back titration for determining hypochlorite content of solutions. J. R. Lewis and R. F. Klockow, 123.
Volumetric determination of vanadium by means of —. E. H. Swift and R. W. Hoeppe, 491.
- Potassium Ion**: Reagent for —. T. G. Y. Arnal, 369.
- Potato** as index of iodine distribution. R. E. Remington, F. B. Culp and H. von Kolnitz, 760.
starch; Manganese in —. 348.
- Potentiometric** titration of ammonia. E. B. R. Prideaux, 365.
- Pottery**: Nature of the colour of —, with special reference to that of ancient Egypt. A. Lucas, 686.
- Powders**: New method of mounting — for microscopical examination. W. O. Howarth, 494.
- Praseodymium**: Atomic weight of —. 296.
- Precipitin** anti-sera; Instability of — in the tropics. H. S. Shrewsbury, 29.
- Preservative**: Boric acid sold as food —. (Legal Notes), 106.
in meat. Refusal of warranty by wholesaler. (Legal Notes), 742.
- Preserves**: tin in —; Volumetric method of determining. B. Glassmann and S. Barsutzkaja, 110.
- President**: Annual Address of the —. E. Hinks, 201.
- Pressor** activity of commercial samples of pituitary extract; Comparison of the oxytocic, anti-diuretic and —. U. G. Bijlsma, J. H. Burn and J. H. Gaddum, 298.
- Propionic Aldehyde**: Menthone as reagent for —. 486.
- N-Propyl Alcohol**: 8.
- Protamines** and Histones. A. Kossel, (Review), 71.
- Protein**: Cod muscle —. 36.
Digestibility of — determined by Bergeim's method. W. D. Gallup, 247.
solutions; Volumetric method for determining —. W. D. Treadwell and W. Eppenberger, 114.
- Proteins**: blood-; Use of molybdic acid as a precipitant for —. S. R. Benedict and E. B. Newton, 428.
cystine in —; Improved colorimetric method for determining. O. Folin and A. D. Marenzi, 553.
nutritive value of —; Quantitative methods of measuring the. H. H. Mitchell, 47.
serum-; Colorimetric determination of the —. D. M. Greenberg, 428.
Studies on the combination between certain basic dyes and —. L. M. C. Rawlins and C. L. A. Schmidt, 487.
tryptophane in —; Further application of the vanillin and hydrochloric acid reaction to the determination of. I. K. Ragins, 115.
- Proteolytic** activity of papain; Measurement of —. H. C. Gore, 762.
enzymes; Reaction of azine compounds with —. G. M. Richardson and R. K. Cannan, 761.
- Proto-Actinium**: Atomic weight of —. 296.
- Protocatechuic Acid**: Isolation of — from pigmented onion scales. K. P. Link, H. R. Angell and J. C. Walker, 240.
- Prunes**: Boron compounds in —. 16.
- Prussian** analysis; Standard method of —. 38.
- Public Analysts**: Notes from the Reports of —. See **Birmingham, Bristol, Gibraltar, Kingston-upon-Hull, Lancaster, Leeds, Salford, Somerset, Stepney**.
Official appointment of —. 285, 332, 411, 536, 657, 735.
Society of —. See **Society of Public Analysts**.
- Pulegone**: oil of —; Microchemical distinction of. 363.
- Pulp** and Paper-Making; Chemistry of —. 2nd Ed. (Review), E. Sutermeister, 626.
- Pungent Principles**: Relations between constitution and taste of —. N. A. Lange, H. L. Ebert and L. K. Youse, 480.
- Pyridone**: Action of Schiff's reagent on —. A. Valdiguié, 112.
- Pyrethrin I and II** in pyrethrum; Determination of —. F. Tattersfield and R. P. Hobson, 549.
in *Pyrethrum cinerariaefolium*: Insecticidal value and determination of —. I. F. Tattersfield and R. P. Hobson, 351.
flowers. I. Determination of the active principles. C. B. Gnadinger and C. S. Corl, 754.
pyrethrin I and II in —; Determination of. F. Tattersfield and R. P. Hobson, 549.
- Pyrites**: Arsenic in arsenical —. 533.
- Pyrethrum Cinerariaefolium**: Insecticidal value and determination of pyrethrin I and II in —. I. F. Tattersfield and R. P. Hobson, 351.
- Pyrogallol**: Absorption of oxygen by alkaline —. T. J. Drakeley and H. Nicol, 306.
method for determining nitrates in soil and waters. L. U. De Nardo, 360.
- Pyrolysis** of Carbon Compounds. (Review), C. D. Hurd, 689.

- Pyrophosphate:** Simultaneous determination of orthophosphate and —. R. Dworzak and W. Reich-Rohewig, 435; W. Stollenwerk and A. Bäurle, 435.
- Pyruvic Acid:** Determination of —. B. H. R. Krishna and M. Sreenivasaya, 59.
- Q**
- Qualitative Analysis.** E. J. Holmyard, 130; W. Wardlaw, 130.
Chemical Analysis; Essentials of —. (Review), J. C. Ware, 438.
- Qualitativen Analyse;** Anleitung zur Organischen —. H. Staudinger, 502.
- Quantitative Analysis;** Inorganic —. H. A. Fales, 502.
Analysis; Theory and Technique of —. M. Farnsworth, 502.
Analytical Chemistry. (Review), W. T. Hall, 258.
oxidation with ceric sulphate; Experiments on —. A. J. Berry, 461.
- Quartz Mercury Vapour Lamp:** Testing seeds, etc., under the —. A. Niethammer, 563.
- Queensland:** Report of the Government Analyst for the year ending June 30, 1929. J. B. Henderson, 746.
- Quicklimes:** Fineness and available lime content of —. J. S. Rogers, 190.
- Quinine:** Ammoniated tincture of —. (Legal Notes), 418, 540.
determination; Rapid method for —. G. A. Sticht, 607.
- R**
- Rabbit fur;** Characteristics of —. 695.
- Racoon fur;** Characteristics of —. 696.
- Radiation:** Photo-chemical method of testing sources of ultra-violet —. F. C. Hymas, 622.
- Radion Alfa:** A reputed remedy for malaria. 290.
- Radium;** Atomic weight of —. 296.
- Rag Flock** from coconut fibre; Excess of soluble chlorine in —. (Legal Notes), 157.
- Raisin wine;** Non-alcoholic —. (Legal Notes), 339.
- Raisins:** Boron compounds in —. 16.
Marking of — under the Merchandise Marks Act, 1928. 170.
- Rancidity** in cacao butter; Kreis reaction as a method for detecting incipient —. T. H. Cooke, 411.
in fats from intact seeds and fruits; Detection of —. A. Niethammer, 548.
Kreis — reaction; Quantitative examination of the. J. Pritzker and R. Jungkunz, 547.
- Rape Oil:** Composition of German —. K. Täufel and C. Bauschinger, 187.
Glycerides of —. K. Täufel and C. Bauschinger, 187.
- Rayon:** (artificial silk); Identification of —. W. D. Grier, 364.
- Reagent** for alkaloids, etc.; Beta-anthraquinone-monosulphonic acid as a microchemical —. L. Rosenthaler, 351.
for detecting cobalt; Potassium cyanate as a —. B. J. F. Dorrington and A. M. Ward, 327.
Phosphoric ion as a sensitive —. Differentiation of antimony and tin. T. G. Y. Arnal, 256.
Sodium alizarinsulphate as a —. F. G. Germuth and C. Mitchell, 308.
- Red Currants:** Boron compounds in —. 17.
- Red Glaze:** Lead in —. A. Gronover and E. Wohnlich, 552.
- Reducing** powers of different sugars for the ferricyanide reagent used in the gasometric sugar method. J. A. Hawkins, 749.
sugars. *See Sugars.*
- Reduction** indicator; Use of 2,6-Dichlorphenol indophenol as — in the examination of foodstuffs. J. Tillmans, P. Hirsch and E. Reinshagen, 176.
- Refraction** of milks low in solids-not-fat. G. D. Elsdon and J. R. Stubbs, 318.
- Refraktometrische** Untersuchung der Milch. (Review), E. Reiss, 127.
- Reichert-Meißl** values; Fall in — on keeping butter samples. P. Arup, 736.
- Reindeer fat;** American —. W. F. Baughman, G. S. Jamieson and R. S. McKinney, 605.
- Reinsch** antimony films; Solubility of — in water. S. G. Clarke, 99.
- Rennet:** Effect of heat on coagulability by —. E. C. V. Mattick and H. S. Hallett, 557.
- Resorcinol:** Reaction of — and a new coloured indicator. L. Bey and M. Faillebin, 561.
- Respiration** apparatus; Acetone as a control substance for —. T. M. Carpenter, E. L. Fox and A. F. Serque, 427.
- Rhenium:** Atomic weight of —. 296.
- Rhodium:** Atomic weight of —. 295.
- Rhubarbs:** Identification and determination of value of —, based on fluorescence. Maheu, —. 478.
- Rice** husks in bran and sharps. A. J. Amos, 332.
kaji; Vitamin B content of polished —. R. Takata, 558.
Manganese in —. 348.
starch; Fatty acids associated with —. L. Lehrman, 548.
starch; Manganese in —. 348.
"toxin"; Beri-beri and —. 291.
- Ricinoleic Acid:** Halogen absorption of —. 446.
- Rickets:** Therapeutic value of irradiated milk in the treatment of —. C. Watson, T. Y. Finlay and J. B. King, 673.
- River water;** Viability of intestinal pathogenic bacteria in —. 291.
- Rocks:** beryllium in —; Determination of small quantities of. B. E. Dixon, 268.
- Rubber:** sulphur in —; Perchloric acid method of determining. E. Wolessky, 61.

- Rubber Seed Oil:** Halogen absorption of —. 446.
- Rubidium:** Atomic weight of —. 295.
Influence of — upon the detection of potassium by zirconium sulphate. R. D. Reed and J. R. Withrow, 370.
- Rubidium Ion:** Reagent for —. T. G. Y. Arnal, 369.
- Ruthenium:** Atomic weight of —. 295.
- Rye** alkaloids; Reaction for the ergot of —. Examination and colorimetric determination of — preparations. H. W. Van Urk, 479.
Ergot of —. See **Ergot of Rye**.
flour in wheat and other flours; Detection of —. J. Tillmans, 43.
flour; New carbohydrate in —. J. Tillmans, 43.
- S**
- Sable fur;** Characteristics of —. 696.
- Safflower Oil:** American —. G. S. Jamieson and S. I. Gertler, 347.
- Salad Dressing:** Standard for mayonnaise —. 107.
- Salford:** Annual Report of the City Analyst for the City of — for the year 1928. H. H. Bagnall, 740.
Average composition of milk in City of —. 467.
Official appointment of Agricultural Analyst for County Borough of —. 536.
Official appointment of Public Analyst for County Borough of —. 411.
- Salicylaldehyde:** Menthone as reagent for —. 486.
- Salicylate** method of separating titanium from tantalum, niobium and zirconium. 459.
- Salicyl-Sulphonic Acid:** J. Rae, 551.
- Salt** in butter and margarine; Routine determination of —. P. Arup, 658.
- Salts** and their Reactions. L. Dobbin and J. E. Mackenzie, 314.
- Samarium:** Atomic weight of —. 296.
- Samin:** 109.
- Samples:** "Informal" —. 466.
- Sampling** after delivery. (Legal Notes), 593.
- Sand** in cinnamon. (Legal Notes), 157.
- Sandstone** Industry (Silicosis) Scheme, 1929.
Determination of silica in — and rocks. 668.
- Sanio's** potassium dichromate test for tannins. C. M. Fear, 227.
- Saponification:** A more stable alcoholic potash reagent for —. D. T. Englis and V. C. Mills, 493.
- Sassafras:** oil of —; Microchemical distinction of. 363.
- Sauerkraut:** Gas production in the making of —. L. M. Preuss, W. H. Peterson and E. B. Fred, 57.
- Sausage:** Preserved —. 155.
- Scandium:** Atomic weight of —. 295.
- Schardinger's** test for the degree of heating of milk. 237.
- Schiff's Reagent:** Action of — on pyramidone. A. Valdiguié, 112.
- Scientific** articles not abstracted: 125, 495, 686.
- Scientific and Industrial Research Dept.** Food Investigation Board Report for the year 1927. 35.
Food Investigation Report No. 33. A critical and historical study of the pectic substances of plants. 594.
Food Investigation Special Report No. 35. Heat insulators. 743.
Fuel Research Paper No. 21. The Assay of Coal for Carbonisation Purposes (Part II). 233.
Fuel Research Paper No. 22. The reactivity of coke. 471.
Water Pollution Research Board Report for year 1927-28. 107.
- Secalose:** 43.
- Seed Fats** of some cultivated species of umbelliferae. B. C. Christian and T. P. Hilditch, 547.
- Seeds:** rancidity in fats from intact —; Detection of. A. Niethammer, 548.
Testing —, etc., under the quartz mercury vapour lamp. A. Niethammer, 563.
- Selenium:** Atomic weight of —. 295.
in organic compounds; Micro-determination of tellurium and —. H. D. K. Drew and C. R. Porter, 682.
Rapid method for determining —. E. Benesch, 63, 191.
- Semicarbazones:** Micro-method for determining — and its application to the analysis of ketones. R. P. Hobson, 562.
- Separator** for fractional distillation under reduced pressure. R. Delaby and R. Charonnat, 124.
- Serological** method of determining ergot in flour. F. S. Okoloff and I. G. Akimoff, 353.
- Serum:** blood-; Colorimetric determination of total and inorganic sulphates in —. E. G. Wakefield, 300.
proteins; Colorimetric determination of the —. D. M. Greenberg, 428.
- Sesame Oil:** Constituents of —. 109.
Manganese in —. 348.
- Sesamin** and sesamolin. W. Adriani, 109.
- Sesamol:** 109.
- Sesamolin:** Sesamin and —. W. Adriani, 109.
- Sewage:** Isolation of *B. paratyphosus* B. from —. J. D. A. Gray, 184.
- Shakespeare** Forgeries in the Revels Accounts. (Review), S. A. Tannenbaum, 627.
- Sharps:** Rice husks in bran and —. A. J. Amos, 332.
- Sheep-Dip** preparation. 104.
- Shellfish:** Bacteriological examination of —. 159.
- Siam:** Report of the Government Laboratory for the year ending March 31st, 1928. A. Marcan, 475.
- Silica:** Biophysics of — and etiology of silicosis. P. Hefferman, 757.

- Silica**—*continued*.
 gels; Platinised — as catalysts for the oxidation of sulphur dioxide. H. N. Holmes, J. Ramsay and A. L. Elder, 771.
 in mineral waters. P. Hefferman, 686.
 in presence of fluorspar; Determination of —. W. T. Schrenk and W. H. Ode, 771.
 in sandstone and rocks; Determination of —. 668.
 in tissues; Determination of —. E. J. King, 52.
- Silicate minerals**; Application of X-rays in the classification of fibrous — commonly termed asbestos. H. V. Anderson and G. L. Clark, 771.
- Silicon**: Atomic weight of —. 295.
- Silicosis**: Etiology of — and biophysics of silica. P. Hefferman, 757.
 in industry in Britain. E. L. Middleton, 757.
 Sandstone Industry (—) Scheme, 1929. 668.
- Silk**: Artificial —. (Review), O. Faust, 499; F. Reinthaler, 260.
 artificial-; Identification of rayon (—). W. D. Grier, 364.
- Silver**: Atomic weight of —. 295.
 in presence of halides and cyanides; Volumetric method for determining —. H. Baines, 678.
- Silver Nitrate**: Determination of ethylene by absorption in a solution of —. V. N. Morris, 487.
- Siphon**: Practical —. H. Wentzel, 125.
- Skim test for the degree of heating of milk**. 238.
- Skunk fur**; Characteristics of —. 696.
- Soap**: American — Maker's Guide. (Review), I. V. S. Stanislaus and P. B. Meerbott, 378.
 Flesh-reducing —. 748.
 sugar in — and — preparations; Determination of. K. Braun and E. Walter, 767.
- Soaps**: Perfumes, Cosmetics and —. Vol. II. W. A. Poucher, 314.
- Society of Chemical Industry**: Annual Reports of the — on the Progress of Applied Chemistry for 1929. 502.
- Society of Public Analysts**:
 Annual Report of Council of —. 198.
 Letter to the Ministry of Agriculture and Fisheries on "Variations in the composition of milk." 472.
 North of England Section. 198, 630.
 Presentation of portrait of Dr. A. H. Hassall to — by Dr. Michael Foster, 567.
 Presidential Address (E. Hinks), 201.
 Proceedings of the —. 1, 73, 131, 197, 265, 315, 381, 445, 503, 567, 629, 693.
- Soda Water**: Lead in —. 747.
- Sodium**: Atomic weight of —. 295.
 Separation of lithium from —. L. Moser and K. Schutt, 370.
 Uranyl zinc acetate as reagent for the quantitative determination of —. I. M. Kolthoff, 435.
- Sodium Alizarinsulphonate** as a reagent: F. G. Germuth and C. Mitchell, 308.
- Sodium Citrate tablets**; Talc in —. 31.
- Sodium Diethyldithiocarbamate** as reagent for the colorimetric determination of minute amounts of copper. 650.
- Sodium Ferrocyanide**: Determination of purity of — by titration with zinc sulphate solution. Farbsalz-Gesellschaft, Berlin, 437.
- Sodium Hydrosulphite**: Some analytical applications of —. (Antimony, bismuth, lead, cadmium.) B. S. Evans, 395.
- Sodium Nitroprusside**: Impurity in commercial narceine which gives a colour reaction with —. J. J. L. Zwiĳker, 425.
- Soil**: Determination of ammonia in — and the adsorption power of — for ammonia. C. Olsen, 676.
 extracts; Cobaltinitrite volumetric method of determining potassium in —. G. Milne, 558.
 nitrates in —; Pyrogallol method for determining. L. U. De Nardo, 360.
 phosphoric acid in —; Application of the strychno-molybdc method to the determination of. C. Antoniani and S. Bonetti, 485.
- Soils**: lime requirements of —; Rapid electro-metric method for measuring. F. Hardy and A. H. Lewis, 184.
 nitrate nitrogen, total nitrogen and other elements in —; Chlorate method for determining. E. M. Emmert, 491.
 organic carbon in —; Determination of. G. W. Robinson, W. McLean and R. Williams, 360.
- Solanum Dulcamara** poisoning by bitter-sweet (—). H. Lowe, 153.
- Solids-not-Fat**: Refraction of milks low in —. G. D. Elsdon and J. R. Stubbs, 318.
- Somerset**: Average composition of milk in —. 467.
 Report of the County Analyst and Bacteriologist for the County of — for 1928. D. R. Wood, 231.
- South Africa, Union of**: Food, Drugs and Disinfectants Act. 600.
- South American cinchona barks**. L. Rosenthaler, 753.
- Soya Bean Oil**: Halogen absorption of —. 446.
 Reactions of —. A. Richard, 241.
- Spanish paprika oil**; Iodine value of —. L. C. Mitchell and S. Alfend, 44.
- Sparteine**: Determination of —. J. Hirt, 672.
- Spectra**: Absorption — and fluorescence of fats. H. P. Kaufmann, 309.
- Spectrographic chemical analysis**. H. Ramage, 373.
- Spectroscope**: Fery — for the qualitative analysis of metals. 546.
- Spectrum**: Universal indicator which gives the colours of the — over a P_H range of 3 to 11.5. H. W. Van Urk, 254.
- Spices**: Boron compounds in —. 18.
- Spinach fat**; Composition of —. J. H. Speer, E. C. Wise and M. C. Hart, 423.
- Spirit thermometers**; Changes of zero in —. 291.

- Spirit of Nitre**: Analysis of —. L. Van Italie, A. J. Steenhauer and A. Harmsma, 244.
- Squalene**: Fatty oil of the "pilgrim" whale. Biological relations between the cholesterol and —. E. André and H. Canal, 605.
- Investigation of —. 38.
- Squill**: Oxymel of —. 156.
- Stains** in the Gutzeit test for arsenic; Production of uniform —. C. H. Manley, 30.
- Standard** for iodine absorption; The Wijs method as —. J. J. A. Wijs, 12.
- for water in margarine. (Legal Notes), 232.
- measurements for mineral water analysis; International —. 33.
- Standardisation** of combustion calorimeters; Benzoic acid as a standard for the —. P. E. Verkade, 124.
- Stannic Sulphide**: Adsorption of phosphoric acid by —. R. Chandelle, 769.
- Starch**: Fatty acids associated with rice —. L. Lehrman, 548.
- Its Chemistry, Technology and Uses. (Review), L. Eynon and J. H. Lane, 373.
- Starches**: Photomicrographs of Philippine —. R. N. Allen, 686, 744.
- Statutory Rules and Orders**: 1928, No. 571. Merchandise Marks. 167. 1928, No. 1052. Merchandise Marks. 169.
- Steel**: alloy-; Determination of arsenic in —. 528.
- aluminium in —; Determination of. A. T. Etheridge, 141.
- carbon-; Determination of arsenic in —. 527.
- Corrosion-resisting — for laboratory use. G. A. Stokes, 538.
- nickel in —; Determination of small amounts of. B. Jones, 582.
- Sulphur determination by the evolution process in cast iron and —. N. D. Ridsdale, 166.
- sulphur in high chromium —; Rapid method for determining. B. S. Evans, 286.
- vanadium in —; Determination of. K. Swoboda, 122.
- Stepney**: Annual Report of the Borough Analyst for the Metropolitan Borough of — for 1928. D. Henville, 540.
- Average composition of milk in Borough of —. 467.
- Sterol** of yeast; Dextro-rotatory —. Zymosterol. H. Penau and G. Tanret, 431.
- Sterols** from muscular tissue of marine animals. 36, 37.
- in butter. A. More, 735.
- Photochemical action of various —. L. Hugounenq and E. Couture, 302.
- Strontium**: Atomic weight of —. 295.
- Determination of barium and —. L. Szebellédy, 682.
- Separation of beryllium from —. 367.
- Strophanthins**: Colorimetric determination of —. A. Leulier and H. Griffon, 672.
- Strophanthus Oil**: Thiocyanogen value of —. E. Van Italie, 606.
- Strychnine Sulphate**: Water in —. W. Schnellbach, 672.
- Strychno-Molybdic Method**: Application of the — to the determination of phosphoric acid in soil. C. Antoniani and S. Bonetti, 485.
- Styrolenes**: Preparation of —. S. Sabetay, 253.
- Sucrase** in must and wine; Occurrence of —. C. von der Heide and H. Mändlen, 355.
- Sucrose**: Detection and determination of — by the ammonium molybdate method. N. W. Matthews, 43.
- Suet**: Shredded beef —. 539.
- Sugar**: Alleged loss of moisture in —. 539.
- blood-; Note on the new ferricyanide method for —. O. Folin, 246.
- in blood; Determination of. I. Observations upon Benedict's alkaline copper solution. M. R. Everett, 430.
- in soap and soap preparations; Determination of —. K. Braun and E. Walter, 767.
- invert-; Modification of the Fiehe test for detecting — in honey. E. K. Nelson, 603.
- Manganese in cane —. 348.
- Sugar Cane molasses**; Some organic acids of —. E. K. Nelson, 670.
- Sugars**: reducing-; Application of the method of Hagedorn and Jensen to the determination of —. C. S. Hanes, 359.
- reducing-; Determination of —, especially dextrose, in presence of hydrocyanic acid by means of alkaline copper solutions. H. Hérissé and A. Chalmeta, 43.
- reducing-; Determination of —, particularly of glucose, by alkaline copper solutions in the presence of hydrocyanic acid. H. Hérissé and A. Chalmeta, 421.
- reducing-; Micro time method for determining —, and its application to the analysis of blood and urine. J. A. Hawkins, 750.
- Reducing powers of different — for the ferricyanide reagent used in the gasometric sugar method. J. A. Hawkins, 749.
- Sulphate** in small amounts of urine; Colorimetric determination of inorganic —. B. S. Kahn and S. L. Leiboff, 115.
- Sulphates** in blood serum, urine and other body fluids; Colorimetric determination of total and inorganic —. E. G. Wakefield, 300.
- Sulphide**: volatile — from muscle; Note on. W. A. Osborne, 51.
- Sulphonated oils**. See Oils: Sulphonated.
- Sulphonic Acid** separation method; Decomposition of phenolsulphonic acids and purification of phenols by the —. H. Bruckner, 189.
- Sulphur**: Action of air on flowers of — and ground —. J. E. Stephenson and S. W. Bridge, 590, 737.
- Atomic weight of —. 295.
- Determination of — by the evolution process in steels and cast iron. N. D. Ridsdale, 166.

Sulphur—*continued*.

- in crude petroleum; Volumetric determination of —. G. Woodward, 616.
 in egg albumin; Loosely-bound —. W. D. Treadwell and W. Eppenberger, 114.
 in galena and lead; Determination of —. H. Leysaht, 489.
 in polysulphides; Volumetric determination of —. P. Szeberényi, 621.
 in rubber; Perchloric acid method of determining —. E. Wolessky, 61.
 Rapid method for dissolving high chromium steels for determination of —. B. S. Evans, 286.
- Sulphur Dioxide**: Detection and determination of —. S. Rothenfusser, 770.
 Detection, determination and oxidation of —. D. Henville, 228.
 Effect of — upon the antiscorbutic property of fruits. A. F. Morgan and A. Field, 483.
 Enabling Act, 1920; Food preservation by —. 597.
 in ground ginger. (Legal Notes), 419, 664.
 in meat. Investigation of the Bullot process for preserving meat. 601.
 in sweets. 662.
 Platinised silica gels as catalysts for the oxidation of —. H. N. Holmes, J. Ramsay and A. L. Elder, 771.
- Sulphuric Acid**: Barium sulphate as indicator of the efficiency of — in drying apparatus. G. Boehm, 373.
- Sulphurous Acid** in food products; Comparison of the Monier-Williams and the A.O.A.C. methods for determining —. J. Fitelson, 297.
- Sulfanas**: Boron compounds in —. 16.
 Marking of — under the Merchandise Marks Act, 1928. 170.
- Sunlight**: Measurement of the strength of —. H. H. Bagnall, 101; J. E. Moss and A. W. Knapp, 334.
 observations. 663.
- Sweets**: Sulphur dioxide in —. 662.
- Syntheses**: Organic —. Vols. VIII and IX. (Review), R. Adams and J. B. Conant, 443.
- Syrup of Chloral**: Determination of chloral in —. Ch. Lormand, 244.

T

- Tabloids**: Apology for misuse of the word —. 345.
- Talc** in drug tablets. 156.
 in sodium citrate tablets. 31.
- Tallow**: Component glycerides of a mutton —. G. Collin, T. P. Hilditch and C. H. Lea, 243.
- Tannic Acid** as a means of separating titanium from beryllium; Objections to use of —. 271.
- Tanning extracts**; Colour-measurement of —. M. A. de la Bruere, 124.
 extracts; Determination of insoluble matter in —. C. Riess, 488.
- Tannins**: Alkaloid test for —. C. M. Fear, 316.
 Sanio's potassium dichromate test for —. C. M. Fear, 227.
- Tantalum**: Atomic weight of —. 296.
 Investigations into the analytical chemistry of niobium, — and their mineral associates. XIV. A new method for separating small quantities of niobium and — from titanium. W. R. Schoeller and C. Jahn, 320.
 XV. A new method for separating — and niobium from titanium and zirconium. W. R. Schoeller, 453. XVI. Observations on tartaric hydrolysis. XVII. Quantitative precipitation of the earth acids and certain other oxides from tartrate solution. W. R. Schoeller and H. W. Webb, 704.
- Tartaric hydrolysis** as an important earth-acid test. 456.
 hydrolysis method for small quantities of earth acids. 321.
 hydrolysis; Observations on —. (Investigations into the analytical chemistry of tantalum, niobium and their mineral associates.) W. R. Schoeller and H. W. Webb, 704.
- Tartrate solutions**; Quantitative precipitation of the earth acids and certain other oxides from —. W. R. Schoeller and H. W. Webb, 704.
- Tartrates**: Oxidation of —. 462.
- Tea**: caffeine in —; Determination of. S. Gobert, 110.
 Manganese in —. 348.
- Tellurium**: Atomic weight of —. 295.
 in organic compounds; Micro-determination of selenium and —. H. D. K. Drew and C. R. Porter, 683.
- Temperature scale**; International —. 292.
- Terbium**: Atomic weight of —. 296.
- Tetanus bacillus** in canned peas; Occurrence of the —. F. Marsh and J. Henderson, 536.
- Tetrachlorethylene**: Pharmacology and toxicology of —. P. D. Lamson, B. H. Robbins and C. B. Ward, 358.
- Tetra-Ethyl Lead**: Reactions of —. G. Edgar and G. Calingaert, 768.
- Tetraodon** (globe fish) poisoning. 476.
- Textiles**: Applied Chemistry. Vol. I. —. (Review), C. K. Tinkler and H. Masters, 311.
- Thallic Oxide**: Electro-analytic determination of thallium as —. A. Jilek and J. Lukas, 681.
- Thallium**: Action of —. 495.
 Atomic weight of —. 296.
 Electro-analytic determination of — as thallic oxide. A. Jilek and J. Lukas, 681.
 Separation of beryllium from —. 367.
- Thallium Tri-Iodide**: 464.
- Thalious Salts**: Analysis of —. 463.
 Titration of — with permanganate in hydrochloric acid solution. A. Jilek and J. Lukas, 255.
- Theobromine**: Microchemical reactions of —. M. Wagenaar, 244.

- Therapeutic value of irradiated milk in the treatment of rickets.** C. Watson, T. Y. Finlay and J. B. King, 673.
- Thermometers:** Changes of zero in spirit —. 291.
- Thiocyanate method for precipitating copper;** Application of the — in the confirmatory tests for cadmium and antimony. A. F. Daggett, 679.
- Thiocyanates:** Iodimetric determination of —. A. Schwicker, 493.
- Thiocyanogen Value of fats containing linolenic acid;** Analysis by means of —. Analysis of linseed oil. H. P. Kaufmann and M. Keller, 304.
of parsley seed oil. A. Steger and J. van Loon, 177.
of strophantus oil and of oils of the chaalmoogra group. E. I. Van Italie, 606.
- Thio-Semi-Carbazide:** Determination of — by means of iodine. A. Gaffre, 188.
- Thiosulphate:** Reaction of cupric salts with —. J. Hanus and V. Hovorka, 254.
- Thorium:** Atomic weight of —. 296.
- Thulium:** Atomic weight of —. 296.
- Thyme:** oil of —; Microchemical distinction of. 364.
- Thyroid Gland:** iodine in —; Determination of. W. Smith, 45.
- Tiglic Acid:** Halogen absorption of —. 448.
- Tin:** Atomic weight of —. 295.
Determination of — by rapid electrolysis. J. Svěda and R. Uzel, 366.
Differentiation of antimony and —. The phosphoric ion as a sensitive reagent. T. G. Y. Arnal, 256.
in organic compounds; Quantitative analysis of —. H. Gilman and W. B. King, 365.
in preserves and other foodstuffs; Volumetric method for determining —. B. Glassmann and S. Barsutzkaja, 110.
in tin plate; Rapid determination of —. K. Heuberger, 769.
volumetric determination of —. H. Wolf and R. Heilingötter, 680.
- Tin-Foil as a packing for rindless cheese.** Elten, —, 552.
- Tin-Zinc Alloys:** Determination of bismuth in — by means of sodium hydrosulphite. 397.
- Tincture of digitalis:** Standardisation of —. F. Wokes, 426.
of iodine and solution of iodine. (Legal Notes), 470.
of quinine; Ammoniated —. (Legal Notes), 418, 540.
- Tinplate:** tin in —; Rapid determination of. K. Heuberger, 769.
- Tissue:** Plant —. See **Plant Tissue.**
- Tissues:** body-; Electrolytic method of determining small amounts of mercury in —. A. G. Young and F. H. L. Taylor, 759.
in fishes; Creatine content of the muscles and some other —. A. Hunter, 299.
silica in —; Determination of. E. J. King, 52.
- Tissues—continued.**
unsaturated fatty acids in —; Distribution of. III. Vital organs of beef. W. R. Bloor, 112.
- Titanium:** Atomic weight of —. 295.
New method for separating small quantities of tantalum and niobium from —. W. R. Schoeller and C. Jahn, 320.
Separation of beryllium from —. 269.
Separation of tantalum and niobium from zirconium and —. W. R. Schoeller, 453.
- Tobacco:** Ammonia and amide nitrogen in — determined by use of permutit. H. B. Vickery and G. W. Pucher, 550.
“Denicotinised” —. 164.
“free nicotine” in —; Determination of. H. B. Vickery and G. W. Pucher, 754.
nitrate nitrogen in —; Determination of. H. B. Vickery and G. W. Pucher, 608.
plants; Effect of boron deficiency on the growth of — in aerated and unaerated solutions. J. E. McMurtrey, 427.
- Tomato catsup,** 163.
Manganese in —. 348.
plants; Analysis of —. O. Owen, 558.
- Tomatoes:** Boron compounds in —. 17.
Vitamin A, B and C content of artificially versus naturally ripened —. M. C. House, P. M. Nelson and E. S. Haber, 301.
- Toxicity:** Cellular — of gaseous and volatile poisons. (Mme.) S. Lallemand, 359.
tests for novarsenobenzene (neosalvarsan). Medical Research Council Special Report No. 128. E. H. Durham, J. H. Gaddum and J. E. Marchal, 667.
- Toxicological Analysis;** Abstracts: 55, 252, 358, 675.
study of bismuth. R. Fabre and M. Picon, 55.
- Toxicology of tetrachlorethylene.** P. D. Lamson, B. H. Robbins and C. B. Ward, 358.
- Toxin:** Beri-beri and rice “—.” 291.
- Tracing Cloth:** Transmission of ultra-violet light through —. C. H. Young, 191.
- Trifructosan:** A new carbohydrate of rye flour. 43.
- Triglycerides:** Physical properties of pure —. R. B. Joglekar and H. E. Watson, 117.
- Tryptophan:** Determination of — by means of *p*-dimethylaminobenzaldehyde. W. J. Boyd, 354.
- Tryptophane in proteins;** Further application of the vanillin and hydrochloric acid reaction to the determination of —. I. K. Ragins, 115.
- Tubercle bacilli;** Milk samples examined for —. 231.
- Tubes:** Meniscus corrections involved in the calibration of graduated —. A. More, 630.
- Tung Oil:** Constitution of α -elaeostearic acid, the most important component of —. J. Böeseken, 305.
Halogen absorption of —. 445.
- Tungsten:** Atomic weight of —. 296.
in ores; *Rapid test for —. A. Petrovsky, 490.

Tungsten—*continued*.

- Precipitation of — as mercurous tungstate. V. Spitzin, 122.
Separation of — from vanadium. A. Jilek and J. Lukas, 490.

U

Ultra-Violet detector as an aid in distinguishing real amber from its imitation. G. Kostka, 256.

- irradiation and heat as means of differentiating vitamins B and G in yeast. C. Kennedy and L. S. Palmer, 674.
light; Comparison of the antirachitic potency of ergosterol irradiated by — and by exposure to cathode rays. A. Knudson and C. N. Moore, 183.
light; Distinction of pigments in —. M. J. Schoen and J. Rinse, 684.
light; Examination of lard in —. F. Weiss, 178.
light; Fluorescence of colouring matters in —. A. Seyewetz and J. Blanc, 309.
light; Fluorescence of honey in —. G. Orbán and J. Stitz, 240.
light; Luminescence of a genuine Dutch lard in —. A. Van Druten, 347.
light; Transmission of — through tracing cloth. C. H. Young, 191.
light; Use of — in detecting refined oil in virgin olive oil. S. Musher and C. E. Willoughby, 672.
radiation; Photo-chemical methods of testing sources of —. F. C. Hymas, 622.
radiation; Zinc sulphide method of measuring —, and the results of a year's observations on Baltimore sunshine. J. H. Clark, 493.
rays; Penetration of — through fabrics. A. Latzke, 484.
rays; Sunlight (—) observations. 663.

Umbelliferae: Seed fats of some cultivated species of —. B. C. Christian and T. P. Hilditch, 547.**Unacrated** solutions; Effect of boron deficiency on the growth of tobacco plants in aerated and —. J. E. McMurtrey, 427.**United Provinces of Agra and Oudh**: Report of the Chemical Examiner for the year 1928. D. N. Chatterji, 474.**United States of America** Department of Agriculture. Certification of coal-tar food colours. The permitted dyes, 345.

Department of Agriculture. Standard for mayonnaise salad dressing. 107.

Unsaponifiable matter of liver oils; Vitamin A content of —. I. S. Meno, M. Yamashita and Y. Ota, 54.**Unsaturated** compounds; Determination of hydrogen value of —. H. I. Waterman, J. N. J. Perquin and H. A. van Westen, 119.
compounds; Use of ozone for determining the constitution of —. J. Doeuvre, 361.**Uranium**: Atomic weight of —. 296.

Separation of gallium from —. 367.

Uranyl Zinc Acetate as reagent for the quantitative determination of sodium. I. M. Kolthoff, 435.**Urea**: allantoin in presence of —; Biochemical determination of. R. Fosse, A. Brunel and P. de Graeve, 479.

Highly accurate method for the analysis of —. M. Taylor, 116.

New method for determining —. F. W. Allen and J. M. Luck, 480.

xanthhydrol as a reagent for —; Preparation and properties of. F. G. Kny-Jones and A. M. Ward, 574.

Uric Acid: Enzymic conversion of — into allantoinic acid. R. Fosse, A. Brunel and R. de Graeve, 557.**Urine**: alcohol in —; Determination of. 134.
allantoin in —; Biochemical determination of. R. Fosse, A. Brunel and P. de Graeve, 479.

Colorimetric determination of total and inorganic sulphates in —. E. G. Wakefield, 300.

Determination of small quantities of lead with special reference to — and biological materials. A. G. Francis, C. O. Harvey and J. L. Buchan, 725.

Excretion of lead in —. H. Millet, 610.

Glucose in normal —. A. Hassan, 50.

inorganic sulphate in small amounts of —; Colorimetric determination of. B. S. Kahn and S. L. Leiboff, 115.

laevulose in —; Colorimetric method for determining. R. C. Corley, 180.

lead in —; Electrolytic determination of. T. Cooksey and S. G. Walton, 97.

Micro time method for determining reducing sugars, and its application to the analysis of blood and —. J. A. Hawkins, 750.

Piperazine for use in analysing —. R. Gros, 49.

Urobilin content of normal human blood. M. A. Blankenhorn, 116.**Urotropine** in wines; New reaction for identifying —. M. V. Jonescu and C. Bodea, 548.

V

Vanadium: Atomic weight of —. 295.

Detection of —. A. Fölsner, 308.

Gravimetric methods for —. L. Moser and O. Brandl, 368.

in steel; Determination of —. K. Swoboda, 122.

Separation of tungsten from —. A. Jilek and J. Lukas, 490.

Volumetric determination of — by means of potassium iodate. E. H. Swift and R. W. Hoeppele, 491.

Vanillaldehyde: Menthone as reagent for —. 486.**Vanillin** and hydrochloric acid reaction; Further application of — to the determination of tryptophane in proteins. J. K. Ragins, 115.
Tests for —. 752.

- Vapour densities**; Determination of — at room temperatures. E. F. Linhorst, 372.
- Varnishes**: Accelerated exposure test for lacquers and —. H. V. Hansen, 192.
- V. Cholerae**: Viability of —. 291.
- Vegetable colours** in foodstuffs; Detection of the prohibited —. J. R. Nicholls, 335.
- foodstuffs; Zinc contents of the principal —. G. Bertrand and B. Benzon, 349.
- powders; New method of mounting — for microscopical examination. W. O. Howarth, 494.
- products; Natural occurrence of boron compounds in —. A. Scott Dodd, 15.
- Vegetables**: Food Investigation Board Report on —. 35.
- iodine in —; Determination of traces of. J. F. McClendon and R. E. Remington, 239.
- Vermicelli**: False labelling of —. 31.
- Vine products**; Boron compounds in —. 19.
- Vinegar**: Artificial —; Liability of retailer. Preston v. Jackson. (Legal Notes), 32.
- banana —; Preparation of. H. von Loesecke, 348.
- “Vita” Glass**: Properties and applications of —. F. E. Lamplough, 495.
- Vitamin**: anti-beri-beri —; Improvements in the method of isolating. B. C. P. Jansen, 613.
- antineuritic-; Further progress towards the isolation of the — from brewers' yeast. A. Seidell, 482.
- Antineuritic —. II. Properties of the “curative” substance. J. L. Rosedale and C. J. Oliveiro, 248.
- antirachitic-; Variations in amounts of the — in different samples of cod-liver oil, milk and butter. K. H. Coward, 302.
- “balance”; “Hypervitaminosis” and —. L. J. Harris and T. Moore, 249.
- content of honey. E. Hoyle, 356.
- terminology. 482.
- tests; Cod-liver oil —. 163.
- Vitamin A**: Absorption spectrum of —. O. Rosenheim and T. A. Webster, 764.
- Alleged relation of carotin to —. W. Duliere, R. A. Morton and J. C. Drummond, 764.
- and carotene. I. Association of — activity with carotene in the carrot root. T. Moore, 765.
- Antimony trichloride colour test for —. N. Evers, 612.
- assay of —; Observations on the. J. C. Drummond and R. A. Morton, 763.
- Association of — with greenness in plant tissue. II. — content of asparagus. J. W. Crist and M. Dye, 300.
- Comparison of biological and colorimetric assays for — as applied to fish oils. E. R. Norris and I. S. Danielson, 612.
- content of artificially versus naturally ripened tomatoes. M. C. House, P. M. Nelson and E. S. Haber, 301.
- contents of the unsaponifiable matter of liver oils. I. S. Meno, M. Yamashita and Y. Ota, 54.
- Vitamin A—continued.**
- content; Relation of — to size of leaves. L. McLaughlin, 764.
- Fluorescence of some fats containing —. R. S. Morgan and K. MacLennan, 250.
- Further studies of the chemical nature of —. J. C. Drummond and L. D. Baker, 557.
- in margarine, butter and other fatty food; Test for —. A. Andersen and E. Nightingale, 481.
- Vitamin B**: Antineuritic and water-soluble — in beef and pork. R. Hoagland, 432.
- content of artificially versus naturally ripened tomatoes. M. C. House, P. M. Nelson and E. S. Haber, 301.
- content of polished rice koji. R. Takata, 558.
- extract; Preparation of — in Java. 290.
- from brewers' yeast; Further progress towards the isolation of the antineuritic —. A. Seidell, 482.
- Heat and ultra-violet irradiation as means of differentiating vitamin G and — in yeast. C. Kennedy and L. S. Palmer, 674.
- Synthesis of — in the rumen of the cow. S. I. Bechdel, H. E. Honeywell, R. A. Dutcher, and M. H. Knutsen, 55.
- terminology. 482.
- Vitamin C**: Chemical detection of —. B. Glassmann and A. Posdeew, 432.
- content of artificially versus naturally ripened tomatoes. M. C. House, P. M. Nelson and E. S. Haber, 301.
- Vitamin D** and resistance of chickens to parasitism. J. E. Eckert and L. A. Spindler, 356.
- Formation and destruction of — on the irradiation of ergosterol. D. Van Stolk. E. Dureuil and Heudebert, 54.
- in ergot of rye. E. Mellanby, E. Surie and D. C. Harrison, 766.
- Quantitative studies of responses to different intakes of —. H. C. Sherman and H. K. Stiebeling, 674.
- Vitamin G**: Heat and ultra-violet irradiation as means of differentiating vitamins B and — in yeast. C. Kennedy and L. S. Palmer, 674.
- Vitamins**: The ABC of —. J. Pryde, 314.
- Volhard's Method** of determining copper applied to electrometric analysis. M. E. Pring and J. F. Spencer, 576.
- Volumetric analysis**; Ceric sulphate in —. VI. Oxidation of hydrogen peroxide by ceric sulphate. Indirect determination of lead. N. H. Furman and J. H. Wallace, 490.
- Analysis; The Practice of —. Part II. (Review), I. M. Kolthoff, 257.
- Analysis. Vol. I. Theoretical Principles of —. (Review), I. M. Kolthoff, 194.
- Vol. II. Practical —. (Review), I. M. Kolthoff, 691.
- determinations by iodate. A. Schwicker, 493.
- Glassware. (Review), V. Stott, 497.

W

- Wagner's Reagent** as means of identifying atropine. C. C. Fulton, 608.
- Wallaby fur**; Characteristics of —. 696.
- Walnut Oil**: Composition of Californian —. G. S. Jamieson and R. S. McKinney, 241.
- Waste liquors**; Two new methods for determining phenol in —. H. Dehe, 121.
- Water** added to milk; Cryoscopic method of detecting —. R. L. Andrew, 210. Applied Chemistry. Vol. I. —. (Review), C. K. Tinkler and H. Masters, 311.
- Composition of — and mosquito breeding. W. Rudolfs and J. B. Lackey, 495.
- faecal organisms in —; Eijkman fermentation test as an aid in detecting. L. W. Leiter, 484.
- in margarine; Standard for —. (Legal Notes), 232.
- in strychnine sulphate. W. Schnellbach, 672.
- Mineral —. See **Mineral Water**.
- organisms in —; Determination of number of. W. Plücker and W. Bartels, 56.
- Pollution Research Board Report for 1927–28. 107.
- Solubility of antimony in —. J. Grant, 227.
- Waters**: Mineral —. See **Mineral Waters**.
- nitrates in —; Pyrogallol method for determining. L. U. De Nardo, 360.
- Water-Soluble** constituents of citrus; Cytological study of —. J. Dufrenoy, 431.
- vitamin *B* in beef and pork. R. Hoagland, 432.
- Weights**: atomic —; Revised table for 1929. 295.
- Whale**: Fatty oil of the "pilgrim" —. Biological relations between the cholesterols and squalene. E. André and H. Canal, 605.
- Whale Oil**: Halogen absorption of —. 446.
- Whisky**: Labelling of —. 741.
- White Metal**: Permanganate titration of white metal in —. A. Wassilieff and H. Stutzer, 620.
- Whiteness** of fabric; Cube photometer for comparing the —. A. Adderley, 684.
- Wijs** method as the standard for iodine absorption. J. J. A. Wijs, 12.
- Wine**: apple and fruit juices in —; Detection of. J. Werder, 476.
- fruit — in grape — detected by means of dibenzal-sorbitol. C. von der Heide and K. Hennig, 422.
- fruit — in grape —; Detection of. B. Bleyer and W. Diemair, 603.
- Non-alcoholic British —. 591.
- Non-alcoholic raisin —. (Legal Notes), 339.
- Orange and quinine —; Non-alcoholic products sold as. (Legal Notes), 288.
- Orange quinine —. (Legal Notes), 339.
- sucrase in must and —; Occurrence of. C. von der Heide and H. Mändlen, 355.
- Wines**: Boron compounds in —. 19.
- Divinyglycol as the cause of the bitter flavour of — suffering from bitterness. E. Voisenet, 421.

Wines—continued.

- urotropine in —; New reaction for identifying. M. V. Jonescu and C. Bodea, 548.
- Wood**: dry-rot-in —; Biochemistry of. E. C. Barton-Wright and J. G. Boswell, 358.
- Wood Oil**: Constitution of α -elaostearic acid, the most important component of Chinese —. J. Böeseken, 305.
- β -Elaostearic acid glyceride and —. Partial halogen addition to unsaturated fatty acids. H. P. Kaufmann and C. Lutenberg, 304.
- Wool fat**; Composition of —. J. C. Drummond and L. C. Baker, 607.
- Writing**: Bleached ink — detected by means of the mercury vapour lamp. 545.

X

- Xanthidrol** as a reagent for urea; Preparation and properties of —. F. G. Kny-Jones and A. M. Ward, 574.
- Xenon**: Atomic weight of —. 295.
- X-Rays**: Application of — in the classification of fibrous silicate minerals commonly termed asbestos. H. V. Anderson and G. L. Clark, 771.

Y

- Yeast** and other micro-organisms in a suspension; Rapid and accurate method for determining the quantity of —. R. J. Williams, E. D. McAlister and R. R. Roehm, 613.
- Dextro-rotatory sterol of —. Zymosterol. H. Penau and G. Tanret, 431.
- isolation of the antineuritic vitamin (vitamin *B*) from brewers' —; Further progress towards the. A. Seidell, 482.
- vitamins *B* and *G* in —; Heat and ultra-violet irradiation as means of differentiating. C. Kennedy and L. S. Palmer, 674.
- Yohimbine**: Identification of — by micro-crystallography. G. Denigès, 179.
- Ytterbium**: Atomic weight of —. 296.
- Yttrium**: Atomic weight of —. 295.

Z

- Zinc**: Atomic weight of —. 295.
- content of the principal vegetable foodstuffs. G. Bertrand and B. Benzou, 349.
- mercury in presence of —; Determination of. 150.
- Separation of beryllium from —. 367.
- Zinc Sulphate** solution; Determination of the purity of potassium and sodium ferrocyanides by titration with —. Farbsalz-Gesellschaft, Berlin, 437.
- Zinc Sulphide** method of measuring ultra-violet radiation, and the results of a year's observations on Baltimore sunshine. J. H. Clark, 493.

- Zirconium**: Atomic weight of:— 295.
Precipitation of — by phosphates. R. D. Reed and J. R. Withrow, 491.
Separation of tantalum and niobium from titanium and —. W. R. Schoeller, 453.
- Zirconium Sulphate**: detection of potassium by —; Influence of lithium, rubidium caesium and magnesium upon the. R. D. Reed and J. R. Withrow, 370.
- Zymosterol**: Dextro-rotatory sterol of yeast. H. Penau and G. Tanret, 431.