

SEWAGE WORKS JOURNAL

VOLUME XV

JAN.-DEC.

1943

Editor:

F. W. MOHLMAN

Executive Secretary:

W. H. WISELY

Published by

Federation of Sewage Works Associations



7.175/43

Sewage Works Journal

Author Index

Abs. = Abstract
Bk. = Book Review
Ed. = Editorial

F. A. = Federation Affairs
Op. = Operator's Corner
Proc. = Proceedings of Local Associations

- Adams, Milton P.** Inter-County Sewage Treatment on Trial. (Abs.) 1254
- ALLEN, WILLIAM A.** Tri-City (Pasadena), California (Year Ended June 30, 1942) (Op.) 563
- ALLISON, S. L.**
Trickling Filter Operation as Practiced at Corpus Christi. (Op.) 729
Use of Sewage Plant Effluent for Industrial Purposes. (Abs.) 797
- ANDERSEN, C. GEORGE.** Overhauling and Repairs to Methane Gasholder. (Op.) 535
- ANDERSON, R. A.** Muskegon Heights, Michigan (1942). (Op.) 742
- Backmeyer, David.** Sludge Concentration and Disposal at Marion, Indiana. (Op.) 1201
- BARTON, BEN H.**
Bark from the Daily Log. (Op.) 936
Interesting Extracts from Operation Reports. (Op.) 739
- BEAUDOIN, ROBERT E.** Reduction of Moisture in Activated Sludge Filter Cake by Electro-Osmosis 1153
- BEARDSLEY, C. W.** West Riding of Yorkshire Rivers Board. (Abs.) 1246
- BEDELL, ARTHUR S.** See Emerson, Charles A.
- BELT, ELMER.** A Sanitary Survey of Sewage Pollution of the Surf and Beaches of Santa Monica Bay. (Abs.) 769
- BERG, E. J. M.**
Management of Sludge Digesters. (Op.) 724
Progress in Certification of Sewage Treatment Plant Operators. (Abs.) 797
- BERNHARDT, CARL J.** Discussion of Paper on "Standard Rate Filter Operation at Westfield, N.Y." by Joseph T. Howson 823
- BERRY, A. E.** The Canadian Point of View on Post-War Problems 1050
- BESSELEVRE, E. B.** Sludge Processing and Utilization. (Abs.) 796
- BRANDT, ALLEN D.** Notes on an Accident at a Small Sewage Treatment Plant Resulting in the Deaths of Three Workers 1096
- BRINLEY, FLOYD J.** Sewage, Algae and Fish 78
- BRUNNER, PAUL L.** A B.O.D. Calculator. (Op.) 86
- Caldwell, D. H.** Description of a Photoelectric Colorimeter. (Op.) 544
- CAMERON, A. B.** Plant Maintenance in War Time. Maintenance of Grounds. (Op.) 289
- CARLSON, HARVE J.** See Ridenour, Gerald M.
- CLARK, HERMAN K.** Classification of Industrial Wastes and Their Possible Effects Upon Sewage Problems. (Abs.) 797
- COHN, MORRIS M.** The Ten Year Plan of Sewage and Waste Treatment 1043
- CRAM, ELOISE B.** The Effect of Various Treatment Processes on the Survival of Helminth Ova and Protozoan Cysts in Sewage 1119
- CRAWFORD, H. VANCE.**
Maintenance of Electric Equipment in Sewage Plants. (Abs.) 1249
Plant Maintenance in War Time. Electrical Equipment and Power Sources. (Op.) 279
- CURRIE, DAVID H.** San Bernardino Sewage Plant Revisions. (Abs.) 773
- Dabney, H. L.** Design of Sewage Treatment Plants to Facilitate Operation. (Abs.) 796
- DAPPERT, A. F.** See Van Kleeck, Le Roy W.
- DECHER, EDWARD P.** Interesting Extracts from Operation Reports. (Op.) 945
- DIXON, R. M.**
Discussion of Paper by Samuel A. Greeley "High Rate Biological Sewage Treatment" 1078
Let's Take a Look. (Abs.) 797
See Lackey, James B.
- DODSON, LEWIS.** Keeping Records of Sewage Treatment Plant Operation. (Abs.) 797
- DORR, JOHN V. N.** Genealogy of Modern Sewage Treatment, a Product of Sanitary, Chemical and Metallurgical Engineering 30
- DUNDAS, WILLIAM A. AND McLAUGHLIN, C. P.** Experience of Chicago, Illinois, in the Preparation of Fertilizer. (Abs.) 790
- Eldridge, E. F.** Textile Mill Waste Treatment and Recirculating Filter for Slaughter-House Wastes. (Abs.) 979
- ELIASSEN, ROLF.** Discussion of Paper by Chris A. Hansen and Harold B. Gotaas on "Sewage Treatment by Flotation." 252
- ELIASSEN, ROLF AND SCHULHOFF, H. B.** Grease Extraction From Sewage and Sludge 491
- ELLIS, M. D.** See ELLIS, M. M.
- ELLIS, M. M. AND ELLIS, M. D.** Photoelectric Determination of Dissolved Oxygen with Amidol 1115

ELMS, J. W. Extracts from 1940 Report of Division of Sewage Disposal, Cleveland, Ohio. (Op.).....	99	GREELEY, SAMUEL A. High Rate Biological Sewage Treat- ment.....	1062
Sewage Treatment Problems in Cleve- land, Ohio.....	40	Organizing and Financing Sewage Treatment Projects. (Abs.).....	584
EMERSON, CHARLES A. The Consulting Engineer and Post-War Planning....	1045	GROFF, GILBERT AND RIDENOUR, G. M. Effect of Break-Point Chlorination on the Biochemical Oxygen Demand of Sewage.....	847
EMERSON, CHARLES A., BEDELL, ARTHUR S. AND ORCHARD, WM. J. Report of Special Committee on Expansion of Secretary's office. (F. A.).....	1232	Habermehl, C. A. See Wallace W. M.	
ENSLOW, LINN H. Influence of the War on Sanitary Engineering.....	181	HAMLIN, E. J. City of Johannesburg, Annual Report of City Engineer. (Abs.).....	779
ERIKSEN, ARNE AND TOWNSEND, LAWRENCE D. The Occurrence and Cause of Pollution of Grays Harbor. (Abs.)	600	Maintenance, Operation and Control of Sewage Treatment Plants. (Abs.)	343, 780
ESCRITT, L. B. Continuous Flow Sedimentation in the Treatment of Sewage. (Abs.).....	775	Scum Removal from Sedimentation Tanks. (Abs.).....	160
Settlement of Detritus in Sewage. (Abs.).....	581	HAMLIN, E. J. AND WILSON, H. Ninth An- nual Report on Sewage Disposal, City of Johannesburg, 1940-1941. (Abs.).....	780
Fain, Mitchell. See Snell, Foster Dee.		HANSEN, CHRIS A. AND GOTAAS, HAROLD B. Sewage Treatment by Flotation..	242
FILBY, E. L. "Blueprint Now"—Aims and Methods of Operation of the Committee on Water and Sewage Works Development. (By title)....	1057	HATCH, B. F. Sewage Treatment at Mili- tary Installations.....	839
FINCH, JOHN. The Possibilities of and Economics Relating to Organic Ma- nures as Applied to Air-Dried Sewage Sludge. (Abs.).....	578	HEUKELEKIAN, H. Effect of the Addition of Sodium Ni- trate on Hydrogen Sulfide Produc- tion and B.O.D. Reduction.....	255
FISCHER, A. J. Vacuum Flotation of Sew- age and Industrial Wastes. (Abs.)...	1249	Grease in Sewage, Sludge and Scum. IV. Transformation of Grease in Acti- vated Sludge.....	499
FLOWER, G. E. Southerly Sewage Treat- ment Plant. (Op.).....	110	HOEFLE, K. F. The Infiltration Problem. (Abs.).....	795
FRANKS, J. T. Interesting Extracts from Operation Reports. (Op.).....	554	HOLMQUIST, CHARLES A. Influence of the War on Sanitary Engineering.....	183
FRANKS, JOHN T. AND CHESTER A. OBMA. Operating Experiences at Army Sew- age Treatment Plants.....	1088	HOLROYD, A. Short Period Mesophilic Sludge Digestion at Davyhuilne. (Abs.).....	583
FREES, S. W. Bituminous Joint Mate- rials. (Abs.).....	795	HOLTJE, R. H. The Biology of Sewage Sprinkling Filters.....	14
FUHRMAN, RALPH E. Vacuum Filters Used in Primary Sludge Dewatering. (Abs.).....	782	HOWE, HOWARD A. See Maxcy, Kenneth F.	
Gehm, Harry W. Recovery of Free Acid from Pickling Liquors. (Abs.).....	1248	HOWLAND, W. E. Mathematical Formu- lation of the Oxygen Sag.....	512
GERDEL, WALTER E. Westerly Sewage Treatment Plant. (Op.).....	104	HOWSON, JOSEPH T. Standard Rate Filter Operation at Westfield, N. Y.....	817
Problems in Plant Operation and Co- ordination. (Op.).....	1183	HUNT, L. W. Galesburg, Illinois, Sanitary District Operation Report (1942). (Op.).....	1208
GILES, J. HENRY. Inlet and Outlet Design for Sedimentation Tanks.....	609	HURLEY, JOHN. Contact Aeration for Sewage Treatment. (Abs.).....	977
GILLESPIE, C. G. Report on a Pollution Survey of Santa Monica Bay Beaches in 1942—Made to California State Board of Health. (Abs.).....	982	HYDE, CHARLES GILMAN. Influence of the War on Sanitary En- gineering.....	185
GOLDTHORPE, H. H. A Cubic Yard of Per- colating Bed Material and A Few Assumptions Based on Experimental Evidence. (Abs.).....	976	Shore Pollution Reduction at San Fran- cisco.....	3
GOTAAS, Harold B. See Hansen, Harold B.		Ingols, Robert S. Dissolved Oxygen Re- cordings with the Dropping Mercury Electrode. (Abs.).....	355
GOULD, RICHARD H. Improved Final Set- tling Tanks at Bowery Bay. (Abs.)...	792	Jackson, R. B. The Chironomid Fly and Its Effects on the Activated Sludge Process. (Abs.)	1253
GRAY, HAROLD FARNSWORTH AND LUD- WIG, HARVEY E. Characteristics and Treatment of Potato Dehydration Wastes.....	71	Mosquito Control. (Abs.).....	1256
		JENKINS, S. H. See Vokes, F. C.	
		JOHNSON, F. E. Rehabilitation of Trick- ling Filter Beds. (Op.).....	91
		JOHNSON, JOHN W. Plant Maintenance in Wartime Mechanical Units. (Op.)...	262

- JONES, JACK M. Keeping Records of Sewage Treatment Plant Operation. (Abs.)..... 797
- JONES, J. M. Improving Efficiency of Sedimentation of Sewage. (Op.).... 733
- Killam, Elson T.** Discussion of Pre-treatment of Acid Chemical Wastes by Willem Rudolfs..... 54
- KIRN, MATT. A Sludge-Level Measuring and Sampling Device. (Op.)..... 89
- KLASSEN, C. W. Discussion of Paper by W. F. Shephard. "Wartime Problems of a State Health Department." 194
- KLEIN, L. The Strength of Sewage: Some Comparative Results. (Abs.)..... 579
- KLEISER, P. J. See Van Kleeck, Le Roy W.
- KOWALCHIK, S. A. Discussion of "Solving Wartime Pollution Problems with Minimum Use of Strategic Materials" by Christian L. Siebert and F. B. Milligan..... 615
- KUNSCH, W. M. Danbury, Conn., Operation Report, Year ended June 30, 1942. (Op.)..... 1210
- Lackey, James B.** and R. M. DIXON. Some Biological Aspects of the Hays Process of Sewage Treatment..... 1139
- LANGDON, PAUL E. A Sewerage Project Designed Without Critical Materials 169
- LEVANDER, C. G. Sewer Cleaning Equipment Required for the Maintenance of the Sewer System. (Abs.)..... 796
- LOGAN, R. P. See Rudolfs, Willem.
- LOVETT, M. Some Recent Developments in the Biological Treatment of Settled Sewage. (Abs.)..... 604
- LUDWIG, HARVEY F. Better Methods for the Determination of Grease. (Abs.)..... 160
- See Gray, Harold Farnsworth.
- LYNCH, JAMES T. AND MANN, UHL T. Rotary Vacuum Filtration of Sludge and the Effect of War on Operation. 807
- Mahlie, W. S.** Industrial Waste Pre-Treatment at Fort Worth, Texas..... 521
- Industrial Wastes as an Administrative and Financial Problem of Cities. (Abs.)..... 797
- MANN, UHL T. See Lynch, James T.
- MARSHALL, W. B. Post-War Projects of Sewage Works Equipment Manufacturers..... 1054
- MAXCY, KENNETH F. AND HOWE, HOWARD A. The Significance of the Finding of the Virus of Infantile Paralysis in Sewage. A Review..... 1101
- McAFEE, H. D. Operating Experiences at a Biofiltration Plant. (Abs.)..... 795
- McCARTHY, JOSEPH A. Treatment of Laundry Wastes. (Abs.)..... 580
- McDONALD, NORMAN G. Operating Results at the North Toronto Sewage Treatment Plant. (Abs.)..... 349
- McGUIRE, C. D. Sampling and Its Relation to Sewage Treatment Plant Operation. (Op.)..... 1199
- McKEEMAN, E. C. Operation of Freeport, Long Island, Sewage Treatment Plant, Before and After Improvements..... 828
- McKHANN, CHARLES F. See Ridenour, Gerald M.
- McLELLAN, R. A. Sewage Treatment at Air-Training Schools in Western Canada. (Abs.)..... 978
- MENEFEE, J. H. Operating Experiences and Laboratory Results of the Sewage Treatment Plant, Camp Wallace, Texas. (Abs.)..... 795
- MILLER, H. E. See Ridenour, G. M.
- MILLIGAN, F. B. See Siebert, Christian L.
- MOHLMAN, F. W. Industrial Wastes in Wartime..... 1164
- Journal and the Federation, The. (Ed.) 1217
- Poliomyelitis and Sewage. (Ed.)..... 122
- Pre-view of the Chicago Wartime Conference. (Ed.)..... 957
- Regional Sewage Treatment. (Ed.).... 326
- Sewage Research—Now! (Ed.)..... 576
- Waste Disposal Problems in Wartime. (Abs.)..... 588
- Your Editor's Thoughts in Black and White. (Ed.)..... 756
- MOORE, W. ALLAN AND RUCHHOFF, C. C. Effect of River Mud Deposits on Determination of B.O.D. of Supernatant Liquor..... 356
- Oxidation-Reduction Studies. II. Oxidation-Reduction Potentials Developed in Sewage and Sewage-Activated Sludge Mixtures..... 880
- Netto, J. P. J.** Testing Station on Ipiranga Sewage. Activated Sludge (Abs.)..... 773
- NUSSBAUMER, N. L. Discussion of paper by Joseph T. Howson on "Standard Rate Filter Operation at Westfield, N.Y."..... 825
- Obma, Chester A.** See Franks, John T.
- OLIVER, J. C. Experiences with Oil Field Wastes. (Abs.)..... 798
- ORCHARD, WILLIAM J. See Emerson, Charles A.
- ORGAIN, H. K. Experience with Sewage Treatment Plants. (Abs.)..... 795
- Palmer, Clyde L.** Filter Room Practice Vacuum Filter Economy. (Op.)..... 547
- Municipal Post-War Project for Sewerage Development..... 1057
- PARKER, DONALD. Extensions to York Sewage Disposal Works. (Abs.)..... 352
- PEARSE, LANGDON. Illinois Water Litigation, 1940-1941. (Abs.)..... 593
- PHILLIPS, ROY C. Plant Maintenance in War Time. Maintenance of Sewers. (Op.)..... 299
- PIATT, WILLIAM M. Influence of the War on Sanitary Engineering..... 187
- PLUM, SVEND. Plumbing Practice and Design. (Bk.)..... 1257
- PRALLE, WM. Use of Concrete Pipe in Sewer Systems (Abs.)..... 796
- PRATT, J. W. See Reinke, E. A.

PROESSLER, ALFRED H. Sludge Processing and Utilization. (Abs.).....	797	SCHULHOFF, H. B. See Eliassen, Rolf.	
Ramseier, Roy E. The Evaluation of Industrial Wastes in the East Bay. (Abs.).....	158	SEATON, A. Synopsis of the Practical Difficulties of River Pollution Prevention. (Abs.).....	161
RAWN, A. M. Discussion of Forum: "Influence of the War on Sanitary Engineering.".....	178	SETTER, L. R. Modified Sewage Aeration—Part I.....	629
READ, C. T. Notes on the Simultaneous Disposal of Sewage Sludge and House Refuse by Composting to Produce Agricultural Fertilizers. (Abs.).....	578	SHEPARD, W. F. Wartime Problems of a State Health Department.....	190
REID, G. GRAHAM. Sewage Treatment for the R.C.A.F. by Trickling Filters. (Abs.).....	349	SIEBERT, CHRISTIAN L. AND MILLIGAN, F. B. Solving Wartime Pollution Problems with Minimum Use of Strategic Materials.....	615
REINKE, E. A. AND PRATT, J. W. Sewage Disposal Practice at Military Establishments in California. (Abs.)....	158	SMITH, F. A. Suggested Method for Neutralizing Waste Pickling Acid Effluents. (Abs.).....	157
REYNOLDSON, T. B. Vorticella as an Indicator Organism for Activated Sludge. (Abs.).....	155	SMITH, H. G. Ventilation of Large Sewers in the City of Los Angeles. (Abs.)....	772
RIDENOUR, G. M. See Groff, Gilbert.		SMITH, R. S. Sanitary Sewage Flows From Industrial Plants.....	525
RIDENOUR, GERALD M., CARLSON, HARVE J. AND MCKHANN, CHARLES F. Effect of Activated Sludge Process on Poliomyelitis Virus.....	673	SNELL, FOSTER DEE AND FAIN, MITCHELL. Chemical Treatment of Laundry Wastes.....	157
RIDENOUR, G. M. AND MILLER, H. E. Discussion of a paper by Kenneth F. Maxcy and Howard A. Howe. "The Significance of the Finding of the Virus of Infantile Paralysis in Sewage.".....	1111	SNELL, J. R. Anaerobic Digestion. II. Nitrogen Changes and Losses During Anaerobic Digestion.....	56
ROBERTS, F. C., JR. Design of Sewage Disposal Plant from the Standpoint of Defense Ratings and Materials. (Abs.).....	160	III. Anaerobic Digestion of Undiluted Human Excreta.....	679
ROSTENBACH, ROYAL E. AND WATERMAN, EARLE L. Sedimentation of Sewage.	453	SPERRY, WALTER A. Aurora (Illinois) Sanitary District—1942. (Op.).....	949
RUCHHOFF, C. C. See Moore, W. Allan.		STAHL, GLENN W. See Rudolfs, Willem.	
RUDOLFS, WILLEM. Acid Waste Treatment with Lime. (Abs.).....	590	STARKEY, R. L. AND WIGHT, K. M. Soil Areas Corrosive to Metallic Iron Through Activity of Anaerobic Sulfate Reducing Bacteria.....	794
Concentration of Activated Sludge by Compacting and Flotation.....	642	STOCKLEY, N. H. Sewage Purification and the Municipal Engineer. (Abs.).....	1246
Pre-Treatment of Acid Chemical Wastes.....	48	STRAUB, CONRAD P. Digestion Studies on Paper Pulp.....	857
RUDOLFS, WILLEM, <i>et al.</i> Critical Review of the Literature of 1942 on Sewage and Waste Treatment and Stream Pollution.....	197	Digestion Studies on Pure Vegetables..	658
Survey of Sewage Research Projects, 1943.....	466, 702	Tatlock, M. W. See Van Kleeck, Le Roy W.	
RUDOLFS, WILLEM AND GLENN W. STAHL. Phosphine and Sludge Digestion. (Abs.).....	356	TOLLES, FRANK C. Observations of a Consulting Engineer on Plant Operation	940
RUDOLFS, WILLEM AND LOGAN, R. P. Effect of Temperature on Sludge Concentration.....	894	TOWNEND, C. B. Regional Control of Sewage. (Abs.).....	1247
Sanborn, N. H. Treatment of Vegetable Cannery Wastes. (Abs.).....	155	TOWNSEND, LAWRENCE D. See Eriksen, Arne.	
SCHAEZLE, T. C. War Time Effects on Treatment Plants. (Op.).....	1193	TROSTLE, N. E. Experiences with the Temple Sewage Treatment Plant. (Abs.).....	797
SCHROEPFER, GEORGE J. An Analysis of Stream Pollution and Stream Standards.....	341	TURNER, H. G. Pennsylvania Anthracite as a Filter Medium. (Abs.).....	592
Influence of the War on Sanitary Engineering.....	188	Van Antwerpen, F. J. Utilization of Pickle Liquor. (Abs.).....	356
Possible Economies in Sludge Disposal Practice. (Abs.).....	784	VAN KLEECK, LE ROY W. Discussion of paper by F. W. Mohlman, "Industrial Wastes in War Time.".....	1177
		Round Table Discussion: "The Significance and Value of Laboratory Tests in Sewage Plant Operation. (Op.)....	310
		Use of Sewage Sludge as Fertilizer. (Abs.).....	788
		VAN KLEECK, LE ROY W., DAPPERT, A. F., TATLOCK, M. W. AND KLEISER, P. J. Report of 1943 Committee on Qualifications of Sewage Treatment Plant Operators. (F. A.).....	1235
		VEATCH, F. M. Sewage Treatment as Applied to Army Camps. (Abs.).....	796

- VELZY, C. R. Developments Indicated by Experience at Buffalo, N.Y. (Abs.)... 781
- VOKES, F. C. AND JENKINS, S. H. The Yardley Sewage Disposal Works of the Birmingham, Tame and Rea District Drainage Board. (Abs.)..... 776
- Walker, A. R. P. The Role of Humus in Soil Fertility and Its Maintenance by the Utilization of Agriculture and Habitation Wastes. (Abs.)..... 983
- WALLACE, W. M. AND HABERMEHL, C. A. Two Years Operation of the Detroit Sewage Treatment Plant. (Abs.).... 1251
- WALTERS, GROVER L. Problems of Disposal of Peach and Tomato Wastes from the Largest Cannery in the West. (Abs.)..... 771
- WATERMAN, EARLE L. See Rostenbach, Royal E.
- WATSON, W. Purification of Strong Sewage by Re-Circulation Through a Percolating Filter. (Abs.)..... 582
- WATTIE, ELSIE. Cultural Characteristics of Zooglea—Forming Bacteria Isolated From Activated Sludge and Trickling Filters..... 476
- WELLS, W. N. Chrome Wastes in an Activated Sludge Plant. (Abs.)..... 798
- WHITE, WM. E. Sludge Processing and Utilization. (Abs.)..... 796
- WHITEHEAD, H. C. Sludge Digestion at York. (Abs.)..... 351
- WIGHT, K. M. See Starkey, R. L.
- WILSON, H. See Hamlin, E. J.
- WINSTON, JOE B. The Sewage Treatment Problem in Rural Sections. (Abs.)... 797
- WIRTS, JOHN J.
Discussion of Paper by J. W. Ellms on "Sewage Treatment Problems in Cleveland, Ohio"..... 45
Easterly Sewage Treatment Plant. (Op.)..... 99
- WOLMAN, ABEL. The Post-War Role of the Sanitary Engineer..... 445

Sewage Works Journal

Subject Index, 1943

Abs. = Abstract
Bk. = Book Review
Ed. = Editorial

F. A. = Federation Affairs
Op. = Operator's Corner
Proc. = Proceedings of Local Associations

Acid Waste Treatment with Lime. Willem Rudolfs (Abs.)	590
ACTIVATED SLUDGE	
Chironomid Fly and Its Effects on the Activated Sludge Process. <i>R. B. Jackson (Abs.)</i>	1253
Concentration of Activated Sludge by Compacting and Flotation. <i>Willem Rudolfs</i>	642
Cultural Characteristics of Zoogaea-Forming Bacteria Isolated from Activated Sludge and Trickling Filters. <i>Elsie Wattie</i>	476
Effect of Activated Sludge Process on Poliomyelitis Virus. <i>Gerald M. Ride-nour, Harve J. Carlson and Charles F. McKhann</i>	673
Modified Sewage Aeration—Part I. <i>L. R. Setter</i>	629
Oxidation-Reduction Studies. II. Oxidation Reduction Potentials De-veloped in Sewage and Sewage-Activated Sludge Mixtures. <i>W. Allan Moore and C. C. Ruckhofs</i>	880
Reduction of Moisture in Activated Sludge Filter Cake by Electro-Osmo-sis. <i>Robert E. Beaudoin</i>	1153
Summary of Experience in Diffused Air Activated Sludge Plant Operation (Op.).....	909
Testing Station on Ipiranga Sewage Activated Sludge. <i>J. P. J. Netto (Abs.)</i>	773
IV. Transformation of Grease in Acti-vated Sludge. H. Heukelekian	499
ADVERTISERS' CONTRIBUTIONS	
Aluminum Company of America.....	985
American Well Works, The.....	988
Chain Belt Company.....	990
Chicago Pump Company.....	993
Climax Engineering Company.....	996
Dorr Company, The—, Inc.....	998
Everson Manufacturing Company.....	1001
Flexible Sewer Road Equipment Co....	1003
General Chemical Company.....	1004
Graver Tank and Mfg. Co., Inc.....	1006
Inertol Company, Inc.....	1007
Inflico, Inc.....	1009
Lakeside Engineering Corp.....	1012
LaMotte Chemical Products Co.....	1013
Link-Belt Company.....	1014
Mabbs Hydraulic Packing Co.....	1016
Mueller Company.....	1017
Pacific Flush-Tank Company.....	1018
Pittsburgh Equitable Meter Co.....	1023
Royer Foundry and Machine Co.....	1025
W. A. Taylor and Co.....	1028
United States Pipe and Foundry Co....	1029
Vapor Recovery Systems Company....	1031
Wallace and Tiernan Co., Inc.....	1033
Yeomans Brothers Co.....	1035

ANAEROBIC DIGESTION	
II. Nitrogen Changes and Losses Dur-ing Anaerobic Digestion. <i>J. R. Snell</i>	56
III. Anaerobic Digestion of Undiluted Human Excreta. <i>J. R. Snell</i>	679
Analysis of Stream Pollution and Stream Standards. <i>George J. Schroepfer</i>	341
Announcement (Op.).....	532
ARMY SEWAGE TREATMENT PLANTS	
Army Post XVII (Half Year Ended June 30, 1942), Report of—. <i>J. T. Franks (Op.)</i>	554
Operating Experiences at Army Sewage Treatment Plants. <i>John T. Franks and Chester A. Obma</i>	1088
Operating Experiences and Laboratory Results of the Sewage Treatment Plant, Camp Wallace, Texas. <i>J. H. Menejee (Abs.)</i>	795
Sewage Disposal Practice at Military Establishments in California. <i>E. A. Reinke and J. W. Pratt (Abs.)</i>	158
Sewage Treatment as Applied to Army Camps. <i>F. M. Veatch (Abs.)</i>	796
Sewage Treatment at Military Installa-tions. <i>B. F. Hatch</i>	839
Aurora (Illinois) Sanitary District—1942. <i>Walter A. Sperry (Op.)</i>	949
Bark from the Daily Log (Op.) 95, 541, 736, 936, 1196	
Better Methods for the Determination of Grease. <i>Harvey F. Ludwig (Abs.)</i> ...	160
BIOCHEMICAL OXYGEN DEMAND	
B.O.D. Calculator. <i>Paul L. Brunner (Op.)</i>	86
Effect of Break-point Chlorination on the Biochemical Oxygen Demand of Sewage. <i>Gilbert Groff and G. M. Ridenour</i>	847
Effect of River Mud Deposits on Deter-mination of B.O.D. of Supernatant Liquor. <i>W. Allan Moore and C. C. Ruckhofs (Abs.)</i>	356
Effect of the Addition of Sodium Ni-trate on Hydrogen Sulfide Produc-tion and B.O.D. Reduction. <i>H. Heu-kelekian</i>	255
Biofiltration Plant, Operating Experi-ences at a—. <i>H. D. McAfee (Abs.)</i> ...	795
Biological Treatment of Settled Sewage, Some Recent Developments in the—. <i>M. Lovett (Abs.)</i>	604
Biology of Sewage Sprinkling Filters, The—. <i>R. H. Holtje</i>	14
Birmingham, Tame and Rea District Drainage Board. (Abs.).....	774
Bituminous Jointing Materials. <i>S. W. Freese (Abs.)</i>	795
Blueprint Now. (Op.).....	1182

"Blueprint Now"—Aims and Methods of Operation of the Committee on Water and Sewage Works Development. <i>E. L. Filby</i>	1057	Continuous Flow Sedimentation in the Treatment of Sewage. <i>L. B. Escritt</i> . (Abs.).....	775
B.O.D. Calculator, A—. <i>Paul L. Brunner</i> . (Op.).....	86	CORROSION	
Bowery Bay, Improved Final Settling Tanks at—. <i>Richard H. Gould</i> . (Abs.)	792	Soil Areas Corrosive to Metallic Iron Through Activity of Anaerobic Sulfate Reducing Bacteria. <i>R. L. Starkey and K. M. Wight</i> . (Abs.).....	794
Buffalo, N. Y., Developments Indicated by Experience at—. <i>C. R. Velzy</i> . (Abs.).....	781	Criteria for Determination of Essential Sanitary Engineers in Public Health Services. (Op.).....	746
California, Sewage Disposal Practice at Military Establishments in—. <i>E. A. Reinke and J. W. Pratt</i> . (Abs.).....	158	Critical Review of the Literature of 1942 on Sewage and Waste Treatment and Stream Pollution, A—. <i>Willem Rudolfs, et al.</i>	197
California Sewage Works Journal. (Abs.)	158, 769	Cubic Yard of Percolating Bed Material and a Few Assumptions Based on Experimental Evidence, A—. <i>H. H. Goldthorpe</i> . (Abs.).....	976
Canadian Point of View on Post-War Problems. <i>A. E. Berry</i>	1050	Cultural Characteristics of Zoogaea-Forming Bacteria Isolated from Activated Sludge and Trickling Filters. <i>Elsie Wattie</i>	476
CERTIFICATION OF OPERATORS			
Progress in Certification of Sewage Treatment Plant Operators. <i>E. J. M. Berg</i> . (Abs.).....	797	Danbury, Connecticut, Operation Report for Year Ended June 30, 1942. <i>W. M. Kunsch</i> . (Op.).....	1210
Report of 1943 Committee on Qualifications of Sewage Treatment Plant Operators. <i>L. W. VanKleeck, A. F. Dappert, M. W. Tatlock, and P. J. Kleiser</i> . (F. A.).....	1235	Davyhulme, Short Period Mesophilic Sludge Digestion at—. <i>A. Holroyd</i> . (Abs.).....	583
Characteristics and Treatment of Potato Dehydration Wastes. <i>Harold Farnsworth Gray and Harvey E. Ludwig</i> ...	71	Description of a Photoelectric Colorimeter. <i>D. H. Caldwell</i> . (Op.).....	544
Chemical Treatment of Laundry Wastes. <i>Foster Dee Snell and Mitchell Fain</i> . (Abs.).....	157	Design of Sewage Disposal Plant from the Standpoint of Defense Ratings and Materials. <i>F. C. Roberts, Jr.</i> (Abs.)...	160
Chicago, Illinois, Experience of—, in the Preparation of Fertilizer. <i>William A. Dundas and C. P. McLaughlin</i> . (Abs.)	790	Design of Sewage Treatment Plants to Facilitate Operation. <i>H. L. Dabney</i> . (Abs.).....	796
Chicago Wartime Conference, Pre-view of the—. (Ed.).....	957	Detroit Sewage Treatment Plant, Two Years Operation of the—. <i>W. M. Wallace and C. A. Habermehl</i> . (Abs.)	1251
Chironomid Fly and Its Effects on the Activated Sludge Process, The—. <i>R. B. Jackson</i> . (Abs.).....	1253	Developments Indicated by Experience at Buffalo, N. Y. <i>C. R. Velzy</i> . (Abs.)...	781
CHLORINATION		Dewatering, Incineration, and Use of Sewage Sludge. A Symposium. (Abs.)	781
Effect of Break-point Chlorination on the Biochemical Oxygen Demand of Sewage. <i>Gilbert Groff and G. M. Ridenour</i>	847	Digestion Studies on Paper Pulp. <i>Conrad P. Straub</i>	857
Chrome Wastes in an Activated Sludge Plant. <i>W. N. Wells</i> . (Abs.).....	798	Digestion Studies on Pure Vegetables. <i>Conrad P. Straub</i>	658
City of Johannesburg, Annual Report of City Engineer. <i>E. J. Hamlin</i> . (Abs.)	779	DISSOLVED OXYGEN	
Classification of Industrial Wastes and Their Possible Effects Upon Sewage Problems. <i>Herman K. Clark</i> . (Abs.)...	797	Dissolved Oxygen Recordings with the Dropping Mercury Electrode. <i>Robert S. Ingols</i> . (Abs.).....	355
CLEVELAND, OHIO		Photoelectric Determination of Dissolved Oxygen with Amidol. <i>M. M. Ellis and M. D. Ellis</i>	1115
1940 Operation Report of the Division of Sewage Disposal. (Op.).....	99	Easterly Sewage Treatment Plant. <i>John J. Wirts</i> . (Op.).....	99
Sewage Treatment Problems in—. <i>J. W. Ellms</i>	40	EDITORIALS	
Colorimeter, Description of a Photoelectric—. <i>D. H. Caldwell</i> . (Op.).....	544	Journal and the Federation.....	1217
Concentration of Activated Sludge by Compacting and Flotation. <i>Willem Rudolfs</i>	642	Poliomyelitis and Sewage.....	122
Connecticut, The Ninth Biennial Report of the State Water Commission, Years 1940-42. (Abs.).....	981	Pre-view of the Chicago Wartime Conference.....	957
Consulting Engineer and Post-War Planning, The—. <i>Charles A. Emerson</i> ...	1045	Regional Sewage Treatment.....	326
Contact Aeration for Sewage Treatment. <i>John Hurley</i> . (Abs.).....	977	Sewage Research—Now!.....	516
		Your Editor's Thoughts in Black and White.....	756
		Effect of Activated Sludge Process on Poliomyelitis Virus. <i>Gerald M. Ridenour, Harve J. Carlson and Charles F. McKhann</i>	673

- Effect of Break-Point Chlorination on the Biochemical Oxygen Demand of Sewage. *Gilbert Groff and G. M. Ridenour* 847
- Effect of River Mud Deposits on Determination of B.O.D. of Supernatant Liquor. *W. Allan Moore and C. C. Ruchhaft*. (Abs.) 356
- Effect of Temperature on Sludge Concentration. *Willem Rudolfs and R. P. Logan* 894
- Effect of the Addition of Sodium Nitrate on Hydrogen Sulfide Production and B.O.D. Reduction. *H. Heukelekian* 255
- Effect of Various Treatment Processes on the Survival of Helminth Ova and Protozoan Cysts in Sewage, The—. *Eloise B. Cram* 1119
- EFFLUENT**
- Sewage Plant Effluent for Industrial Purposes, Use of—. *S. L. Allison*. (Abs.) 797
- Electrical Equipment and Power Sources. Plant Maintenance in War Time. *H. Vance Crawford*. (Op.) 279
- Evaluation of Industrial Wastes in the East Bay, The—. *Roy E. Ramseier*. (Abs.) 158
- Evaluation of Sewage Treatment, The—. *W. J. O'Connell, Sr.* (Abs.) 160
- Experience of Chicago, Illinois, in the Preparation of Fertilizer. *William A. Dundas and C. P. McLaughlin*. (Abs.) 790
- Experience with Sewage Treatment Plants. *H. K. Orgain*. (Abs.) 795
- Experiences with Oil Field Wastes. *J. C. Oliver*. (Abs.) 798
- Experiences with the Temple Sewage Treatment Plant. *N. E. Trostle*. (Abs.) 797
- Extensions to York Sewage Disposal Works. *Donald Parker*. (Abs.) 352
- Extracts from 1940 Report of Division of Sewage Disposal, Cleveland, Ohio. *J. W. Ellms*. (Op.) 99
- Federation Affairs**
- Aid to Sewage Works Priorities. (F. A.) 342
- Alphabetical List of Members (F. A.) 419
- Associate Members (F. A.) 362
- Blueprint Now. (F. A.) 970
- Federation Furnishes Priorities Service. (F. A.) 966
- Federation of Sewage Works Associations. (F. A.) 358, 972
- Federation Membership. (Op.) 531
- Fourth Annual Convention—Wartime Conference. (F. A.) 1228
- Important Notice! Win a \$100 War Bond for Membership Activity! (F. A.) 1244
- Important Priorities Changes Announced. (F. A.) 338
- Members of the Federation and Subscribers to the Journal as of December 31, 1942. (F. A.) 362
- Minutes:**
- Meeting of 1942 Board of Control. (F. A.) 183
- Meeting of 1943 Board of Control. (F. A.) 142
- Meeting of the Election Committee of Board of Control. (F. A.) 142
- Non-Association Subscribers to Sewage Works Journal in the United States as of December 31, 1942. (F. A.) 410
- Report of Civilian Defense Committee. (F. A.) 150
- Report of 1943 Committee on Qualifications of Sewage Treatment Plant Operators. *L. W. Van Kleeck, A. F. Dappert, M. W. Tallock, and P. J. Kleiser*. (F. A.) 1235
- Report of Secretary. (F. A.) 147
- Report of Special Committee on Expansion of Secretary's Office. *Charles A. Emerson, Arthur S. Bedell and William J. Orchard*. (F. A.) 1232
- Sanitary Corps, U. S. Army, The—. (F. A.) 388
- Secretaries of Member Associations. (F. A.) 166
- Filter Room Practice Vacuum Filter Economy. *Clyde L. Palmer*. (Op.) 547
- Financing Sewage Treatment Projects, Organizing and—. *Samuel A. Greeley*. (Abs.) 584
- Findlay, Ohio, Excerpts from 1942 Operation Report. *Ben H. Barton*. (Op.) 739
- Correction 953
- Flotation, Sewage Treatment by—. *Chris. A. Hansen and Harold B. Gotaas* 242
- Fort Worth, Texas, Industrial Waste Pretreatment at—. *W. S. Mahlie* 521
- Forum: Influence of the War on Sanitary Engineering. *Linn H. Enslow, Charles A. Holmquist, Charles Gilman Hyde, William M. Piatt, George J. Schroepfer, and A. M. Rawn* 181
- Freeport, Long Island, Sewage Treatment Plant, Before and After Improvements, Operation of—. *E. C. McKeeman* 828
- Gadgets:**
- B.O.D. Calculator. *Paul L. Brunner*. (Op.) 86
- Sludge-Level Measuring and Sampling Device. *Matt Kirm*. (Op.) 89
- Sludge Pump Piston Cleaner. (Op.) 90
- Starch Dispenser for Use in D. O. Titrations. (Op.) 943
- Galesburg, Illinois, Sanitary District Operation Report for 1942. *L. W. Hunt*. (Op.) 1208
- Gasholder, Overhauling and Repairs to Methane—. *C. George Andersen*. (Op.) 535
- Genealogy of Modern Sewage Treatment, a Product of Sanitary, Chemical and Metallurgical Engineering. *John V. N. Dorr* 30
- GREASE**
- Better Methods for the Determination of Grease. *Harvey F. Ludwig*. (Abs.) 160
- Grease Extraction from Sewage and Sludge. *Rolf Eliassen and H. B. Schulhoff* 491
- Grease in Sewage, Sludge and Scum. IV. Transformation of Grease in Activated Sludge. *H. Heukelekian* 499
- Hays Process of Sewage Treatment, Some Biological Aspects of the—** *James B. Lackey and R. M. Dixon* 1139

High Rate Biological Sewage Treatment. Samuel A. Greeley. Discussion by R. M. Dixon.	1062	Utilization of Pickle Liquor. F. J. Van Antwerpen. (Abs.)	356
Huddersfield, Treatment of Sewage on Percolating Filters at—, (Abs.)	976	Waste Disposal Problems in Wartime. F. W. Mohlman. (Abs.)	588
Humus, Role of—, in Soil Fertility and Its Maintenance by the Utilization of Agriculture and Habitation Wastes. A. R. P. Walker. (Abs.)	983	Industrial Wastes as an Administrative and Financial Problem of Cities. W. S. Mahlie. (Abs.)	797
Illinois Water Litigation, 1940-1941. Langdon Pearse. (Abs.)	593	Industrial Wastes in Wartime. F. W. Mohlman. Discussion by LeRoy W. Van Kleeck	1164
Important Revisions in Sewage Works Priorities Forthcoming. (Op.)	565	Infiltration Problem, The—. K. F. Hoefle. (Abs.)	795
Improved Final Settling Tanks at Bowery Bay. Richard H. Gould. (Abs.)	792	Inlet and Outlet Design for Sedimentation Tanks. J. Henry Giles.	609
Improving Efficiency of Sedimentation of Sewage. J. M. Jones. (Op.)	733	Inter-County Sewage Treatment on Trial. Milton P. Adams. (Abs.)	1254
Industrial Waste Pre-Treatment at Fort Worth, Texas. W. S. Mahlie.	521	Ipiranga, Testing Station on— Sewage. Activated Sludge. J. P. J. Netto. (Abs.)	773
INDUSTRIAL WASTES		Joint Meeting, N. J., Sewage Treatment Works (1942). Edward P. Decher. (Op.)	945
Acid Waste Treatment with Lime. Willem Rudolfs. (Abs.)	590	Keeping Records of Sewage Treatment Plant Operation. Lewis Dodson. (Abs.)	797
Characteristics and Treatment of Potato Dehydration Wastes. Harold Farnsworth Gray and Harvey E. Ludwig.	71	Keeping Records of Sewage Treatment Plant Operation. Jack M. Jones. (Abs.)	797
Chemical Treatment of Laundry Wastes. Foster D. Snell and Mitchell Fain. (Abs.)	157	Laboratory Tests, The Significance of—, in Sewage Plant Operation. Le Roy W. Van Kleeck. (Op.)	310
Chrome Wastes in an Activated Sludge Plant. W. N. Wells. (Abs.)	798	Let's Take a Look. R. M. Dixon. (Abs.)	797
Classification of Industrial Wastes and Their Possible Effects Upon Sewage Problems. Herman K. Clark. (Abs.)	797	Local Association Meetings. (Proc.)	337, 606, 802, 984
Critical Review of the Literature of 1942. Willem Rudolfs et al.	197	Los Angeles, Ventilation of Large Sewers in the City of—. H. G. Smith. (Abs.)	772
Evaluation of Industrial Wastes in the East Bay. Roy E. Ramseier. (Abs.) . . .	158	Maintenance of Electric Equipment in Sewage Plants. H. V. Crawford. (Abs.)	1249
Experiences with Oil Field Wastes. J. C. Oliver. (Abs.)	798	Management of Sludge Digesters. E. J. M. Berg. (Op.)	724
Industrial Waste Pre-Treatment at Fort Worth, Texas. W. S. Mahlie. . . .	521	Marion, Indiana, Sludge Concentration and Disposal at—. David Backmeyer. (Op.)	1201
Industrial Wastes as an Administrative and Financial Problem of Cities. W. S. Mahlie. (Abs.)	797	Massachusetts Department of Public Health Division of Sanitary Engineering Annual Report (1941). (Abs.)	580
Industrial Wastes in Wartime. F. W. Mohlman. Discussion by LeRoy W. Van Kleeck	1164	Mathematical Formulation of the Oxygen Sag. W. E. Howland.	512
Occurrence and Cause of Pollution of Grays Harbor. Arne Eriksen and Lawrence D. Townsend. (Abs.)	600	Maintenance of Grounds. Plant Maintenance in War Time. A. B. Cameron. (Op.)	289
Pre-Treatment of Acid Chemical Wastes. Willem Rudolfs.	48	Maintenance of Sewers. Plant Maintenance in War Time. Roy C. Phillips. (Op.)	299
Problems of Disposal of Peach and Tomato Wastes from the Largest Cannery in the West. Grover L. Walters. (Abs.)	771	Maintenance, Operation and Control of Sewage Treatment Plants, The—. E. J. Hamlin. (Abs.)	780
Recovery of Free Acid from Pickling Liquors. Harry W. Gehm. (Abs.)	1248	Maintenance, Operation and Control of Sewage Treatment Plants, The—. E. J. Hamlin. (Abs.)	343
Sanitary Sewage Flows from Industrial Plants. R. S. Smith.	525	Melbourne and Metropolitan Board of Works. (Abs.)	774
Suggested Method for Neutralizing Waste Pickling Acid Effluents. F. Smith. (Abs.)	157	Members of the Federation and Subscribers to the Journal as of December, 31, 1942. (F. A.)	362
Textile Mill Waste Treatment and Recirculation Filter for Slaughterhouse Wastes. E. F. Eldridge. (Abs.) . . .	979	Michigan Sewage Works Operators Conference Bulletin. (Abs.)	1249
Treatment of Laundry Wastes. Joseph A. McCarthy. (Abs.)	580		
Treatment of Vegetable Cannery Wastes. N. H. Sanborn. (Abs.)	155		

- Modified Sewage Aeration—Part I. *L. R. Selter*..... 629
- More About Selective Service. (Op.).... 85
- Mosquito Control. *R. B. Jackson*. (Abs.) 1256
- Municipal Post-War Project for Sewerage Development, A—*Clyde L. Palmer*. 1057
- Muskegon Heights, Michigan (1942). *R. A. Anderson*. (Op.)..... 742
- Correction..... 953
- New Sewage Works Priorities Order. (Op.)..... 748
- New York Section, Western—, Discuss Pumps and Safety. (Op.)..... 119
- Ninth Annual Report on Sewage Disposal, City of Johannesburg, 1940–41. *E. J. Hamlin and H. Wilson*. (Abs.)..... 780
- Ninth Biennial Report of the State Water Commission, Connecticut, Years 1940–1942, The—. (Abs.)..... 981
- Notes on an Accident at a Small Sewage Treatment Plant Resulting in the Deaths of Three Workers. *Allen D. Brandt*..... 1096
- Notes on the Simultaneous Disposal of Sewage Sludge and House Refuse by Composting to Produce Agricultural Fertilizers. *C. T. Read*. (Abs.)..... 578
- Observations of a Consulting Engineer on Plant Operation.** *Frank C. Tolles*. (Op.)..... 940
- Occurrence and Cause of Pollution of Grays Harbor, The—. *Arne Eriksen and Lawrence D. Townsend*. (Abs.)... 600
- Operating Experiences and Laboratory Results of the Sewage Treatment Plant, Camp Wallace, Texas. *J. H. Menefee*. (Abs.)..... 795
- Operating Experiences at a Biofiltration Plant. *H. D. McAfee*. (Abs.)..... 795
- Operating Experiences at Army Sewage Treatment Plants. *John T. Franks and Chester A. Obma*..... 1088
- Operating Results at the North Toronto Sewage Treatment Plant. *Norman G. McDonald*. (Abs.)..... 349
- Operation of Freeport, Long Island, Sewage Treatment Plant, Before and After Improvements. *E. C. McKee-man*..... 828
- OPERATION REPORTS**
- Army Post XVII (Half Year Ended June 30, 1942). *J. T. Franks*. (Op.)... 554
- Aurora, Illinois, Sanitary District (1942). *Walter A. Sperry*. (Op.).... 949
- Birmingham, Tame and Rea District Drainage Board, Year 1941–42. (Abs.)..... 774
- Cleveland, Ohio. (Op.)..... 99
- Danbury, Conn., Year Ended June 30, 1942. *W. M. Kunsch*. (Op.)..... 1210
- Findlay, Ohio, 1942. Operation Report. *Ben H. Barton*. (Op.)..... 739
- Correction..... 953
- Galesburg, Illinois, Sanitary District (1942). *L. W. Hunt*. (Op.)..... 1208
- Joint Meeting (N. J.) Sewage Treatment Works (1942). *Edward P. Decher*. (Op.)..... 945
- Johannesburg, City of—, 1940–41. *E. J. Hamlin*. (Abs.)..... 780
- Year Ended June 30, 1942. (Abs.)... 779
- Massachusetts Department of Public Health Division of Sanitary Engineering Annual Report (1941). (Abs.) 580
- Melbourne and Metropolitan Board of Works, Year Ended June 30, 1942. (Abs.)..... 774
- Muskegon Heights, Mich. (1942). *R. A. Anderson*. (Op.)..... 742
- Correction..... 953
- Tri-City (Pasadena) California, Year Ended June 30, 1942. *William A. Allen*. (Op.)..... 563
- Organizing and Financing Sewage Treatment Projects. *Samuel A. Greeley*. (Abs.)..... 584
- Overhauling and Repairs to Methane Gasholder. *C. George Andersen*. (Op.) 535
- Oxidation-Reduction Studies. II. Oxidation-Reduction Potentials Developed in Sewage and Sewage-Activated Sludge Mixtures. *W. Allen Moore and C. C. Ruchhaft*..... 880
- Oxygen Sag, Mathematical Formulation of the—. *W. E. Howland*..... 512
- Pennsylvania Anthracite as a Filter Medium.** *H. G. Turner*. (Abs.)..... 592
- Personnel Problems. (Op.)..... 84
- Phosphine and Sludge Digestion. *Willem Rudolfs and Glenn W. Stahl*. (Abs.)... 356
- Photoelectric Determination of Dissolved Oxygen with Amidol. *M. M. Ellis and M. D. Ellis*..... 1115
- PLANT MAINTENANCE IN WAR TIME**
- Electrical Equipment and Power Sources. *H. Vance Crawford*. (Op.)... 279
- Maintenance of Grounds. *A. B. Cameron*. (Op.)..... 289
- Maintenance of Sewers. *Roy C. Phillips*. (Op.)..... 299
- Mechanical Units. *John W. Johnson*. (Op.)..... 262
- Plumbing Practice and Design. *Svend Plum*. (Bk.)..... 1257
- POLIOMYELITIS**
- Effect of Activated Sludge Process on Poliomyelitis Virus. *Gerald M. Ridenour, Harve J. Carlson and Charles F. McKhann*..... 673
- Poliomyelitis and Sewage. (Ed.)..... 122
- Significance of the Finding of the Virus of Infantile Paralysis in Sewage. A Review. *Kenneth F. Macey and Howard A. Howe*. Discussion by *G. M. Ridenour and H. E. Miller*..... 1111
- Possible Economies in Sludge Disposal Practice. *George J. Schroeffer*. (Abs.) 784
- Possibilities of and Economics Relating to Organic Manures as Applied to Air-Dried Sewage Sludge, The—. *John Finch*. (Abs.)..... 578
- Post-War Planning, Sewage Purification Services in Relation to National—. (Abs.)..... 354
- POST-WAR PROBLEMS (SYMPOSIUM)**
- "Blueprint Now"—Aims and Methods of Operation of the Committee on Water and Sewage Works Development. *E. L. Filby*. (By Title)..... 1057

Canadian Point of View on Post-War Problems. <i>A. E. Berry</i>	1050	
Consulting Engineer and Post-War Planning, The—. <i>C. A. Emerson</i> ...	1045	
Introduction: Ten Year Plan of Sewage and Waste Treatment. <i>Morris M. Cohn</i>	1043	
Municipal Post-War Project for Sewerage Development. <i>Clyde L. Palmer</i>	1057	
Post-War Projects of Sewage Works Equipment Manufacturers. <i>W. B. Marshall</i>	1054	
Post-War Role of the Sanitary Engineer, The—. <i>Abel Wolman</i>	445	
Practical Difficulties of River Pollution Prevention. (Abs.).....	353	
Pre-treatment of Acid Chemical Wastes. <i>Willem Rudolfs</i> . Discussion by <i>Elson T. Killam</i>	48	
Pre-View of the Chicago Wartime Conference. (Ed.).....	957	
PRIORITIES		
Important Priorities Changes Announced. (F. A.).....	338	
Important Revisions in Sewage Works Priorities Forthcoming. (Op.).....	565	
New Sewage Works Priorities Order. (Op.).....	748	
Problems of Plant Operation and Coordination. <i>Walter E. Gerdel</i> . (Op.).....	1183	
Proceedings of the Twenty-Fourth Texas Water Works and Sewage Short School. (Abs.).....	795	
PROCEEDINGS OF LOCAL ASSOCIATIONS		
California Sewage Works Assn.	328, 959	
Canadian Institute on Sewage and Sanitation.....	130	
Florida Sewage Works Assn.	767	
Michigan Sewage Works Assn.	1219	
Missouri Water and Sewerage Conference.....	758	
New England Sewage Works Assn.	125, 758, 1224	
New York State Sewage Works Assn.	334, 760	
North Dakota Water and Sewage Works Conference.....	126, 1225	
Ohio Conference on Sewage Treatment.....	765	
Pacific Northwest Sewage Works Assn.	766	
Pennsylvania Sewage Works Assn.	965	
Rocky Mountain Sewage Works Assn.	1223	
South Dakota Water and Sewage Works Conference.....	1221	
Progress in Certification of Sewage Treatment Plant Operators. <i>E. J. M. Berg</i> . (Abs.).....	797	
Protection of Sewage Works in War Time. (Op.).....	711	
PUMPS		
Maintenance of Electric Equipment in Sewage Plants. <i>H. V. Crawford</i> . (Abs.).....	1249	
Sludge Pump Piston Cleaner. (Op.)....	90	
Western New York Section Discuss Pumps and Safety. (Op.).....	119	
Purification of Strong Sewage by Recirculation Through a Percolating Filter. <i>W. Watson</i> . (Abs.).....	582	
Records		
Keeping Records of Sewage Treatment Plant Operation. <i>Lewis Dodson</i> . (Abs.).....	797	
<i>Jack M. Jones</i> . (Abs.).....	797	
Recovery of Free Acid from Pickling Liquors. <i>Harry W. Gehm</i> . (Abs.)....	1248	
Red River of the North Research Investigation. (Abs.).....	602	
Reduction of Moisture in Activated Sludge Filter Cake by Electro-Osmosis. <i>Robert E. Beaudoin</i>	1153	
References to Sewage Literature....	162, 799	
Regional Control of Sewage. <i>C. B. Townsend</i> . (Abs.).....	1247	
Regional Sewage Treatment. (Ed.)....	326	
Rehabilitation of Trickling Filter Beds. <i>F. E. Johnson</i> . (Op.).....	91	
Report of Civilian Defense Committee. (F. A.).....	150	
Report of Secretary. (F. A.).....	147	
Report on a Pollution Survey of Santa Monica Bay Beaches in 1942—Made to California State Board of Health. <i>C. G. Gillespie</i> . (Abs.).....	982	
River Mud Deposits, Effect of—, on Determination of B.O.D. of Supernatant Liquor. <i>W. Allan Moore and C. C. Ruchhoft</i> . (Abs.).....	356	
Role of Humus in Soil Fertility and Its Maintenance by the Utilization of Agriculture and Habitation Wastes. <i>A. R. P. Walker</i> . (Abs.).....	983	
Rotary Vacuum Filtration of Sludge and the Effect of War on Operation. <i>James T. Lynch and Uhl T. Mann</i> ...	807	
Sampling and Its Relation to Sewage Treatment Plant Operation. <i>C. D. McGuire</i> . (Op.).....		1199
San Bernardino Sewage Plant Revisions. <i>David H. Currie</i> . (Abs.).....	773	
San Francisco, Shore Pollution Reduction at—. <i>Charles Gilman Hyde</i>	3	
Sanitary Engineer, The Post War Role of the—. <i>Abel Wolman</i>	445	
Sanitary Engineering, Influence of the War on—. <i>Linn H. Enslow, Charles A. Holmquist, Charles Gilman Hyde, William M. Piatt, George J. Schroeffer and A. M. Rawn</i>	181	
Sanitary Engineers and Post-War Construction. (Abs.).....	1246	
Sanitary Engineers, Criteria for Determination of Essential—. (Op.).....	746	
Sanitary Sewage Flows from Industrial Plants. <i>R. S. Smith</i>	525	
Santa Monica Bay, Report on a Pollution Survey of—Beaches in 1942. <i>C. G. Gillespie</i> . (Abs.).....	982	
Santa Monica Bay, Sanitary Survey of Sewage Pollution of the Surf and Beaches of—. <i>Elmer Belt</i> . (Abs.)....	769	
Scum Removal from Sedimentation Tanks. <i>E. S. Hamlin</i> . (Abs.).....	160	
Second Chicago Convention, The—....	803	
Second Wartime Sanitation Conference—An Essential Meeting, The—. (Op.)	908	
Sedimentation of Sewage. <i>Royal E. Rosentbach and Earle L. Waterman</i>	453	
Sedimentation of Sewage, Improving Efficiency of—. <i>J. M. Jones</i> . (Op.)...	733	

- Sedimentation Tanks, Inlet and Outlet Design for— *J. Henry Giles*. 609
- Sedimentation Tanks, Scum Removal from— *E. S. Hamlin*. (Abs.) 160
- SELECTIVE SERVICE
- More About Selective Service. (Op.) 85
- Selective Service and Sewage Works Employees. (Op.) 533
- Settlement of Detritus in Sewage, The— *L. B. Escritt*. (Abs.) 581
- Sewage, Algae and Fish. *Floyd J. Brinley* 78
- Sewage Disposal Practice at Military Establishments in California. *E. A. Reinke and J. W. Pratt*. (Abs.) 158
- Sewage, Effect of Various Treatment Processes on the Survival of Helminth Ova and Protozoan Cysts in Sewage. *Eloise B. Cram*. 1119
- Sewage Purification and the Municipal Engineer. *N. H. Stockley*. (Abs.) 1246
- Sewage Purification Services in Relation to National Post-War Planning. (Abs.) 354
- Sewage Research—Now! (Ed.) 576
- Sewage Research Projects, Survey of— 1943. *Willem Rudolfs et al.* 466, 702
- Sewage, Sedimentation of— *Royal E. Rostenbach and Earle L. Waterman*. 453
- Sewage, Settlement of Detritus in— *L. B. Escritt*. (Abs.) 581
- Sewage Sludge for Victory Gardens. (Op.) 710
- Sewage, Strength of—: Some Comparative Results. *L. Klein*. (Abs.) 579
- SEWAGE TREATMENT
- Contact Aeration for Sewage Treatment. *John Hurley*. (Abs.) 977
- Critical Review of the Literature of 1942. *Willem Rudolfs et al.* 197
- Evaluation of Sewage Treatment. *W. J. O'Connell, Sr.* (Abs.) 160
- Genealogy of Modern Sewage Treatment, a Product of Sanitary, Chemical and Metallurgical Engineering. *John V. N. Dorr*. 30
- Inter-County Sewage Treatment on Trial. *Milton P. Adams*. (Abs.) 1254
- Observations of a Consulting Engineer on Plant Operation. *Frank C. Tolles*. (Op.) 940
- Problems of Plant Operation and Coordination. *Walter E. Gerdel*. (Op.) 1183
- Regional Sewage Treatment. (Ed.) 326
- Sampling and Its Relation to Sewage Treatment Plant Operation. *C. D. McGuire*. (Op.) 1199
- Sewage Treatment as Applied to Army Camps. *F. M. Veatch*. (Abs.) 796
- Sewage Treatment at Air-Training Schools in Western Canada. *R. A. McLellan*. (Abs.) 978
- Sewage Treatment Problem in Rural Sections. *Joe B. Winston*. (Abs.) 797
- Sewage Treatment Problems in Cleveland, Ohio. *J. W. Ellms*. 40
- Some Biological Aspects of the Hays Process of Sewage Treatment. *James B. Lackey and R. M. Dixon*. 1139
- Some Recent Developments in Biological Treatment of Settled Sewage. *M. Lovett*. (Abs.) 604
- Sewage Treatment at Air-Training Schools in Western Canada. *R. A. McLellan*. (Abs.) 978
- Sewage Treatment at Military Installations. *B. F. Hatch*. 839
- Sewage Treatment by Flotation. *Chris A. Hansen and Harold B. Gotaas*. Discussion by *Rolf Eliassen*. 242
- Sewage Treatment for the R.C.A.F. by Trickling Filters. *G. Graham Reid*. (Abs.) 349
- SEWAGE TREATMENT PLANTS
- Design of Sewage Disposal Plant from the Standpoint of Defense Ratings and Materials. *F. C. Roberts, Jr.* (Abs.) 160
- Design of Sewage Treatment Plants to Facilitate Operation. *H. L. Dabney*. (Abs.) 796
- Experience with Sewage Treatment Plants. *H. K. Orgain*. (Abs.) 795
- Experiences with the Temple Plant. *N. E. Trostle*. (Abs.) 797
- Extensions to York Sewage Disposal Works. *Donald Parker*. (Abs.) 352
- Freeport, Long Island. *E. C. McKee-man*. 828
- Let's Take a Look. *R. M. Dixon*. (Abs.) 797
- Maintenance, Operation and Control of Sewage Treatment Plants. *E. J. Hamlin*. (Abs.) 343, 780
- Notes on an Accident at a Small Sewage Treatment Plant Resulting in the Deaths of Three Workers. *Allen D. Brandt*. 1096
- Operating Experiences and Laboratory Results of the Sewage Treatment Plant, Camp Wallace, Texas. *J. H. Menefee*. (Abs.) 795
- Operating Experiences at a Biofiltration Plant. *H. D. McAfee*. (Abs.) 795
- Operating Results at the North Toronto Sewage Treatment Plant. *Norman G. McDonald*. (Abs.) 349
- Protection of Sewage Works in War-time. (Op.) 710
- San Bernardino Sewage Plant Revisions. *David H. Currie*. (Abs.) 773
- Sewerage Project Designed Without Critical Materials. *Paul E. Langdon*. 169
- Two Years Operation of the Detroit Sewage Treatment Plant. *W. M. Wallace and C. A. Habermehl*. (Abs.) 1251
- War Time Effects on Treatment Plants. *T. C. Schaetzle*. (Op.) 1193
- Yardley Sewage Disposal Works. *F. C. Vokes and S. H. Jenkins*. (Abs.) 776
- Sewage Treatment Problem in Rural Sections. *Joe B. Winston*. (Abs.) 797
- Sewage Treatment Problems in Cleveland, Ohio. *J. W. Ellms*. Discussion by *John J. Wirts*. 40
- Sewerage Project Designed Without Critical Materials. A—. *Paul E. Langdon*. 169
- Sewer Cleaning Equipment Required for the Maintenance of the Sewer System. *C. G. Levander*. (Abs.) 796
- Shore Pollution Reduction at San Francisco. *Charles Gilman Hyde*. 3
- Short Period Mesophilic Sludge Digestion at Davyhulme. *A. Holroyd*. (Abs.) 583

Significance and Value of Laboratory Tests in Sewage Plant Operation, The—. Leader: <i>LeRoy W. Van Kleeck</i> . (Op.).....	310	Sludge Processing and Utilization. <i>E. B. Besselièvre</i> . (Abs.).....	796
Significance of the Finding of the Virus of Infantile Paralysis in Sewage, The—. A Review. <i>Kenneth F. Maxcy and Howard A. Howe</i> . Discussion by <i>G. M. Ridenour and H. E. Miller</i> ...	1101	Sludge Processing and Utilization. <i>Alfred H. Proessler</i> . (Abs.).....	797
SLUDGE		Sludge Processing and Utilization. <i>William E. White</i> . (Abs.).....	796
Dewatering, Incineration, and Use of Sewage Sludge. A Symposium. (Abs.).....	781	Sludge Pump Piston Cleaner, A—. (Op.)	90
Effect of Temperature on Sludge Concentration. <i>Willem Rudolfs and R. P. Logan</i>	894	Soil Areas Corrosive to Metallic Iron through Activity of Anaerobic Sulfate Reducing Bacteria. <i>R. L. Starkey and K. M. Wight</i> . (Abs.).....	794
Experience of Chicago, Illinois, in the Preparation of Fertilizer. <i>William A. Dundas and C. P. McLaughlin</i> . (Abs.)	790	Solving Wartime Pollution Problems with Minimum Use of Strategic Materials. <i>Christian L. Siebert and F. B. Milligan</i> . Discussion: <i>S. A. Kowalchik</i> ...	615
Notes on the Simultaneous Disposal of Sewage Sludge and House Refuse by Composting to Produce Agricultural Fertilizers. <i>C. T. Read</i> . (Abs.).....	578	Some Biological Aspects of the Hays Process of Sewage Treatment. <i>James B. Lackey and R. M. Dixon</i>	1139
Possible Economies in Sludge Disposal Practice. <i>George J. Schroepfer</i> . (Abs.)	784	Some Recent Developments in the Biological Treatment of Settled Sewage. <i>M. Lovett</i> . (Abs.).....	604
Possibilities of and Economics Relating to Organic Manures as Applied to Air-Dried Sewage Sludge. <i>John Finch</i> . (Abs.).....	578	Southerly Sewage Treatment Plant. <i>G. E. Flower</i> . (Op.).....	110
Rotary Vacuum Filtration of Sludge and the Effect of War on Operation. <i>James T. Lynch and Uhl T. Mann</i> ...	807	Standard Rate Filter Operation at Westfield, N. Y. <i>Joseph T. Howson</i> . Discussion by <i>Carl J. Bernhardt and N. L. Nussbaumer</i>	817
Sewage Sludge for Victory Gardens? (Op.).....	710	Starch Dispenser for Use in D.O. Titrations, A—. (Op.).....	943
Sludge Concentration and Disposal at Marion, Indiana. <i>David Backmeyer</i> . (Op.).....	1201	State Health Department, Wartime Problems of a—. <i>W. F. Shephard</i>	190
Sludge Processing and Utilization. <i>E. B. Besselièvre</i> . (Abs.).....	796	Stream Control Commission, The—. (Abs.).....	980
<i>Wm. E. White</i> . (Abs.).....	796	STREAM POLLUTION	
<i>Alfred H. Proessler</i> . (Abs.).....	797	Analysis of Stream Pollution and Stream Standards. <i>George J. Schroepfer</i>	341
Use of Sewage Sludge as Fertilizer. <i>LeRoy W. Van Kleeck</i> . (Abs.).....	788	Critical Review of the Literature of 1942. <i>Willem Rudolfs et al.</i>	197
Vacuum Filters Used in Primary Sludge Dewatering. <i>Ralph E. Fuhrman</i> . (Abs.).....	782	Mathematical Formulation of the Oxygen Sag. <i>W. E. Howland</i>	512
Sludge Concentration and Disposal at Marion, Indiana. <i>David Backmeyer</i> . (Op.).....	1199	Occurrence and Cause of Pollution of Grays Harbor. <i>Arne Eriksen and Lawrence D. Townsend</i> . (Abs.).....	600
SLUDGE DIGESTION		Practical Difficulties of River Pollution Prevention. (Abs.).....	353
Anaerobic Digestion		Report on a Pollution Survey of Santa Monica Bay Beaches in 1942—Made to California State Board of Health. <i>C. G. Gillespie</i> . (Abs.).....	982
II. Nitrogen Changes and Losses During Anaerobic Digestion. <i>J. R. Snell</i>	56	Red River of the North Research Investigation. (Abs.).....	602
III. Anaerobic Digestion of Undiluted Human Excreta. <i>J. R. Snell</i>	679	Sanitary Survey of Sewage Pollution of the Surf and Beaches of Santa Monica Bay. <i>Elmer Bell</i> . (Abs.).....	769
Digestion Studies on Paper Pulp. <i>Conrad P. Straub</i>	857	Sewage, Algae and Fish. <i>Floyd J. Brinley</i>	78
Digestion Studies on Pure Vegetables. <i>Conrad P. Straub</i>	658	Stream Control Commission, The—. (Abs.).....	980
Management of Sludge Digesters. <i>E. J. M. Berg</i> . (Op.).....	724	Synopsis of the Practical Difficulties of River Pollution Prevention. <i>A. Seaton</i> . (Abs.).....	161
Phosphine and Sludge Digestion. <i>Willem Rudolfs and Glenn W. Stahl</i> . (Abs.).....	356	Strength of Sewage: Some Comparative Results, The—. <i>L. Klein</i> . (Abs.)...	579
Short Period Mesophilic Sludge Digestion at Davyhulme. <i>A. Holroyd</i> . (Abs.).....	583	Suggested Method for Neutralizing Waste Pickling Acid Effluents, A—. <i>F. Smith</i> . (Abs.).....	157
Sludge Digestion at York. <i>H. C. Whitehead</i> . (Abs.).....	351	Summary of Experience in Diffused Air Activated Sludge Plant Operation. (Op.).....	909
Sludge-Level Measuring and Sampling Device, A—. <i>Matt Kirn</i> . (Op.).....	89		

- Survey of Sewage Research Projects—
1943. *Willem Rudolfs, et al.* Part I. 466
Part II. 702
- Synopsis of the Practical Difficulties of
River Pollution Prevention. *A. Seaton.* (Abs.) 161
- Textile Mill Waste Treatment and Re-**
circulating Filter for Slaughter-House
Wastes. *E. F. Eldridge.* (Abs.) 979
- Temple, Experiences with the—Sewage
Treatment Plant. *N. E. Trostle.*
(Abs.) 797
- Ten Year Plan of Sewage and Waste
Treatment, The—. *Morris M. Cohn.* 1043
- Testing Station on Ipiranga Sewage.
Activated Sludge. *J. P. J. Netto.*
(Abs.) 773
- Tips and Quips. 116, 572, 753, 953,
1214
- Toronto (North) Sewage Treatment
Plant, Operating Results at the—.
Norman G. McDonald. (Abs.) 349
- Treatment of Laundry Wastes. *Joseph A. McCarthy.* (Abs.) 580
- Treatment of Sewage on Percolating
Filters at Huddersfield. (Abs.) 976
- Treatment of Vegetable Cannery Wastes.
N. H. Sanborn. (Abs.) 155
- Tri-City (Pasadena), California (Year
Ended June 30, 1942). *William A. Allen.* (Op.) 563
- Trickling Filter Operation as Practiced at
Corpus Christi. *S. L. Allison.* (Op.) 729
- TRICKLING FILTERS**
- Biology of Sewage Sprinkling Filters.
R. H. Holtje. 14
- Cubic Yard of Percolating Bed Ma-
terial and a Few Assumptions Based
on Experimental Evidence. *H. H. Goldthorpe.* (Abs.) 976
- Discussion. 1245
- Cultural Characteristics of Zooglea-
Forming Bacteria Isolated from Ac-
tivated Sludge and Trickling Filters.
Elsie Wattie. 476
- High Rate Biological Sewage Treat-
ment. *Samuel A. Greeley.* Discussion
by *R. M. Dixon.* 1062
- Pennsylvania Anthracite as a Filter
Medium. *H. G. Turner.* (Abs.) 592
- Purification of Strong Sewage by Re-
circulation through a Percolating
Filter. *W. Watson.* (Abs.) 582
- Rehabilitation of Trickling Filter Beds.
F. E. Johnson. (Op.) 91
- Sewage Treatment for the R.C.A.F.
by Trickling Filters. *G. Graham Reid.*
(Abs.) 349
- Standard Rate Filter Operation at
Westfield, N. Y. *Joseph T. Howson.*
Discussion by *Carl J. Bernhardt* and
N. L. Nussbaumer. 817
- Treatment of Sewage on Percolating
Filters at Huddersfield. (Abs.) 976
- Trickling Filter Operation as Practiced
at Corpus Christi. *S. L. Allison.* (Op.) 729
- Two Years Operation of the Detroit
Sewage Treatment Plant. *W. M. Wallace* and *C. A. Habermehl.* (Abs.) 1251
- Use of Concrete Pipe in Sewer Systems.
William Pralle. (Abs.) Discussion by
R. V. Andrews. 796
- Use of Sewage Plant Effluent for Indus-
trial Purposes. *S. L. Allison.* (Abs.) 797
- Use of Sewage Sludge as Fertilizer. *LeRoy W. Van Kleeck.* (Abs.) 788
- Utilization of Pickle Liquor. *F. J. Van Antwerpen.* (Abs.) 356
- Vacuum Filter Economy, Filter Room**
Practice—. *Clyde L. Palmer.* (Op.) 547
- Vacuum Filters Used in Primary Sludge
Dewatering. *Ralph E. Fuhrman.*
(Abs.) 782
- Vacuum Filtration of Sludge and the
Effect of War on Operation. *James T. Lynch* and *Uhl T. Mann.* 807
- Vacuum Flotation of Sewage and Indus-
trial Wastes. *A. J. Fischer.* (Abs.) 1249
- Vorticella as an Indicator Organism for
Activated Sludge. *T. B. Reynoldson.*
(Abs.) 155
- War Production Board.** (Op.) 566
- Wartime Effects on Treatment Plants.
T. C. Schaetzle. (Op.) 1193
- Wartime Problems of a State Health De-
partment. *W. F. Shephard.* Discus-
sion by *C. W. Klassen.* 190
- Waste Disposal Problems in Wartime.
F. W. Mohlman. (Abs.) 588
- Westerly Sewage Treatment Plant. *Walter E. Gerdel.* (Op.) 104
- Western New York Section Elect Officers
—Discuss Pumps and Safety. (Op.) 119
- Westfield, N. Y., Standard Rate Filter
Operation at—. *Joseph T. Howson.*
Discussion by *Carl J. Bernhardt* and
N. L. Nussbaumer. 817
- West Riding of Yorkshire Rivers Board.
C. W. Beardsley. (Abs.) 1246
- Yardley Sewage Disposal Works of the**
Birmingham, Tame and Rea District
Drainage Board. The—. *F. C. Vokes*
and *S. H. Jenkins.* (Abs.) 776
- York Sewage Disposal Works, Extension
to—. *Donald Parker.* (Abs.) 352
- York, Sludge Digestion at—. *H. C. White-*
head. (Abs.) 351
- Your Editor's Thoughts in Black and
White. (Ed.) 756

