

## CONTENTS

## NUMBER 1, SEPTEMBER, 1945

I. The Calculation of Biological Assay Results by Graphic Methods. The All-or-None Type of Response. Edwin J. de Beer.....	1
II. Antithyroid Studies. II. The Goitrogenic Activity of Some Imidazoles and Benzimidazoles. W. G. Bywater, D. A. McGinty and N. D. Jenesel..	14
III. The Experimental Basis for the Quantitative Chemotherapy of <i>B. novyi</i> in Mice with a Comparison of Action of Penicillin and Dichlorphenarsine Hydrochloride. Arthur P. Richardson, Harry A. Walker, Prudence Loeb and Irving Miller.....	23
IV. Distribution and Fate of Penicillin in the Body. Windsor C. Cutting, F. P. Ludueña, Marshall Fiese, Henry W. Elliott and John Field, II..	36
V. Effect of Various Electrolytes upon the Toxicity of Desoxycorticosterone Acetate. Hans Selye, J. Mintzberg and E. M. Rowley.....	42
VI. The Blocking Action of the Cinchona Alkaloids and Certain Related Compounds on the Cardio-Inhibitory Vagus Endings of the Dog. Edwin Hiatt, Dugald Brown, Gertrude Quinn and Kurt MacDuffie.....	55
VII. Isopropyl Alcohol. Acquired Tolerance in Dogs, Rate of Disappearance from the Blood Stream in Various Species, and Effects on Successive Generation of Rats. A. J. Lehman, Henry Schwerma and Eleanor Rickards.....	61
VIII. Further Observations on the Pressor Action of Optical Isomers of Sympathomimetic Amines. E. E. Swanson, Frank A. Steldt and K. K. Chen.....	70
IX. The Hydrolysis of Demerol by Liver <i>in vitro</i> . Frederick Bernheim and Mary L. C. Bernheim.....	74
X. Biological Comparison of Local Anaesthetics. Edith Bülbring and Isabella Wajda.....	78
XI. Synthetic Substitutes for Atropine. H. R. Ing, G. S. Dawes and Isabella Wajda.....	85

## NUMBER 2, OCTOBER, 1945

XII. Continuous Intravenous Chemotherapy of <i>Plasmodium lophurae</i> Infection in Ducks. A. C. Bratton, Jr.....	103
XIII. A Short-term Chronic Toxicity Test Employing Mice. A. C. Bratton, Jr... 111	111
XIV. The Central Stimulant Action of Some Vasopressor Amines. Marshall R. Warren and Harold W. Werner.....	119
XV. Observations on the Nature of the Antagonism of Histamine by $\beta$ -dimethylaminoethyl Benzhydryl Ether (Benadryl). J. A. Wells, H. C. Morris, Henry B. Bull and Carl A. Dragstedt.....	122
XVI. Antithyroid Studies. III. The Goitrogenic Activity of Certain Chemotherapeutically Active Sulfones and Related Compounds. D. A. McGinty and W. G. Bywater.....	129
XVII. Studies on the Mechanism of Action of Sympathomimetic Amines. I. The Effect of Various Amines on the Synthesis of Cocarboxylase. Wm. M. Govier, Vera Bergmann, and Karl H. Beyer.....	140
XVIII. Studies on the Mechanism of Action of Sympathomimetic Amines. II. The Effect of Sympathomimetic Amines on the Succinoxidase System as Influenced by the Presence of $\alpha$ -tocopherol Phosphate. Wm. M. Govier, Vera Bergmann and Karl H. Beyer.....	143

XIX. Studies on Shock Induced by Hemorrhage. XIII. Isolation of a Lactic Dehydrogenase Inhibitor from Liver. Margaret E. Greig and William E. de Turk.....	150
XX. Studies on Shock Induced by Hemorrhage. XIV. The Effects of Injection into Dogs of Amino Acid Oxidase Inhibitor. Margaret E. Greig and William E. de Turk.....	154
XXI. The Effect of Digitalis upon Coagulation Time of the Blood. Helen Ramsey, N. W. Pinschmidt and H. B. Haag.....	159
XXII. Studies on Antimalarial Drugs. The Metabolism of Quinine and Quinidine in Birds and Mammals. F. E. Kelsey, F. K. Oldham and E. M. K. Geiling.....	170
XXIII. The Effect of Different Intravenous Injection Rates upon the AD <sub>50</sub> , LD <sub>50</sub> and Anesthetic Duration of Pentothal in Mice, and Strength-Duration Curves of Depression. Miles H. Robinson.....	176
XXIV. The Effect of Ether, Divinyl Ether and Cyclopropane Anesthesia upon the Heart Rate and Rhythm and Blood Pressure during Normal Respiratory Activity and during Artificial Respiration after Respiratory Arrest. Benjamin H. Robbins.....	192
XXV. Studies on Cyclopropane. IX. The Effect of Premedication with Demerol upon the Heart Rate, Rhythm and Blood Pressure in Dogs under Cyclopropane Anesthesia. Benjamin H. Robbins.....	198
XXVI. The Degradation of Quinine in the Duck, Chicken and Dog. Earl H. Dearborn and E. K. Marshall, Jr.....	202

## NUMBER 3, NOVEMBER, 1945

XXVII. The Chronic Toxicity of Quinacrine (Atabrine). O. Garth Fitzhugh, Arthur A. Nelson and Herbert O. Calvery.....	207
XXVIII. The Antidiuretic Action of Barbiturates (Phenobarbital, Amytal, Pentobarbital) and the Mechanism Involved in this Action. R. C. de Bodo and K. F. Prescott.....	222
XXIX. The Absorption of Thiourea from Ointments Applied to Wounds. Jacob W. Williamson, Jr., Marshall R. Warren and Harold W. Werner.....	234
XXX. Antibiotic Substances Active against <i>M. tuberculosis</i> . Milton T. Bush, H. L. Dickison, Charlotte B. Ward and Roy C. Avery.....	237
XXXI. Sulfonamides for Bacillary Dysentery. I. The Antibacterial Activity of Sulfacarboxythiazoles and Sulfathiadiazole. H. J. White, P. H. Bell, J. F. Bone, J. C. Dempsey and M. E. Lee.....	247
XXXII. The Inhibitory Effect of Atabrine and Some Acridine Derivatives upon Acid-Fast Bacilli <i>in vitro</i> . Roy C. Avery and Charlotte B. Ward.....	258
XXXIII. The Spirocheticidal and Trypanocidal Action of Acid-Substituted Phenyl Arsenoxides as a Function of pH and Dissociation Constants. Harry Eagle.....	265
XXXIV. The Sympathomimetic Vasodilating Action of the Aliphatic Amines. Raymond P. Ahlquist.....	283

## NUMBER 4, DECEMBER, 1945

XXXV. The Excretion of Sodium Trichloracetate. O. Zafer, V. Paykoç and Joan F. Powell.....	289
XXXVI. The By-Effects of Anti-Hemorrhagic Quinones. II. Antipressor Action in Chronic Hypertension in Man. Norman Rosenthal and Shepard Shapiro.....	294
XXXVII. The Absorption of Cinchona Alkaloids in the Chick and Its Relationship to Antimalarial Activity. P. B. Marshall.....	299

XXXVIII. Goitrogenic Agents and Thyroidal Iodine: Their Pharmacodynamic Interplay upon Thyroid Function. W. T. Salter, R. E. Cortell and E. A. McKay.....	310
XXXIX. A Contribution to the Pharmacology of 5-nitro-2-furaldehyde Semicarbazone. John C. Krantz, Jr., and William E. Evans, Jr.....	324
XL. Reaction of Tissue Aldehydes with Certain Drugs. Kurt A. Oster and Jean G. Oster.....	332
XLI. Induction of Nutritional Deficiency by Oral Administration of Streptomycin. Gladys A. Emerson and Dorothy G. Smith.....	336
XLII. The Choleric Action of Dehydrocholic Acid (Decholin) and Deoxycholic Acid (Degalol) in Chronic Biliary Fistula Dogs. Eldon M. Boyd, W. F. Perry and W. C. Stewart.....	343
XLIII. A Note on the Bell and Krantz Modification of the Knudson-Dresbach Chemical Assay of Digitalis. Bert J. Vos, Jr., and Llewellyn H. Welsh....	346
XLIV. The Response of the Hamster to Drugs. K. K. Chen, Clarence E. Powell and Nila Maze.....	348
XLV. Studies on Factors Influencing the Toxicity of Nicotine. The Effects of Water and Food Deprivation; Disturbed Liver Function and Rate of Administration. H. B. Haag, P. S. Larson and J. K. Finnegan.....	356
XLVI. Determination of DDT (2,2-bis (p-Chlorophenyl) 1,1,1-Trichloroethane) and Its Metabolite in Biological Materials by Use of the Schechter-Haller Method. Ruth R. Ofner and Herbert O. Calvery.....	363
XLVII. Index.....	371