## CONTENTS

### Number 1, May, 1943

I. Effect on the Electrical Activity of the Cortex of Certain Depressant and Stimulant Drugs—Barbiturates, Morphine, Caffeine, Benzedrine and Adrenalin. Frederic A. Gibbs and George L. Maltby ........................................ 1

II. A Comparison of the Acute and Chronic Toxicity of Carbon Dioxide with Especial Reference to Its Narcotic Action. J. H. Barbour and M. H. Severs ................................................................. 11

III. Serial Determination of Cardiac Output (Ballistocardiogram) and Electrocardiogram in Normal Man after the Intravenous Administration of Purified Cardiac Glycosides. Ludwig W. Eichna, Harry Taube and Arthur C. deGraff ......................................................... 22

IV. Reduction of Fluid Loss from Damaged (Burned) Tissues by a Barbiturate. Henry K. Beecher and Jane D. McCarrell .......................................................... 39

V. Sodium Succinate as an Antidote for Barbiturate Poisoning and in the Control of the Duration of Barbiturate Anesthesia. Samuel Soakin and Matthew Taubenhaus ................................................. 49

VI. The Chronic Toxicity of the Sulfonamides for the Growing Rat as Influenced by the Type of Diet, the Addition of Feces to the Diet, and Appetite. Jerome S. Harris and Henry I. Kohn ....................................................... 56

VII. Studies on Ointments. I. Penetration of Various Ointment Bases. Ernest A. Strakosch ............................................................ 65

VIII. The Biological Assay of Posterior Pituitary Solution. R. Blackwell Smith, Jr., and Bert J. Vos, Jr. ............................................................. 72

IX. The Chemical Nature of Compounds which Inhibit the Function of the Thyroid Gland. E. B. Astwood ................................................................. 79

X. The Effect of High Fat Diet on Chronic Toxicity of Derris and Rotenone. Anthony M. Ambrose, Floyd De Eds and Alvin J. Cox, Jr. ................................. 90


XII. Antipressor Effects of Orthoquinoid Epinephrine Derivatives in Experimental Hypertension in the Rat. Kurt A. Oster and Harry Sobotka .......... 100

### Number 2, June, 1943


XIV. Anesthesia. VIII. The Anesthetic Action of Isopropenyl Methyl Ether. John C. Krantz, Jr., C. Jeliff Carr, William E. Evans, Jr., and Sylvan E. Forman ............................................................. 115


XVII. The Ineffectiveness of Adrenal Cortex Extracts in Standardized Hemorrhagic Shock. K. A. Huizenga, B. L. Brofman and C. J. Wiggers .......................... 139

XVIII. The Estimation of Quinine in Human Plasma with a note on the Estimation of Quinidine. Bernard B. Brodie and Sidney Udenfriend .... 154

XIX. The Comparative Activity of Quinine, Quinidine, Cinchonine, Cinchonidine and Quinoidine against Plasmodium lophurae Infections of Pekin Ducklings. A. O. Seeler, E. Dusenbery and C. Malanga .............. 159
CONTENTS

XX. Flavicin: an Antibacterial Substance Produced by an *Aspergillus flavus*. Milton T. Bush and Andres Goth .......................................................... 164

XXI. A Possible Method for the Determination of Prolonged Action of the Barbiturates. Versa V. Cole ........................................................................ 170


XXIV. The Overt and Masked Manifestations of Folliculoid Hormones. Eleanor Clark and Hans Selye ........................................................................ 187


XXVI. Studies on the Detoxication of Organic Arsenical Compounds. II. Correlation of the Quantity of p-Aminobenzoic Acid Required to Protect Rats against High Doses of Carbarsone and Arsanilic Acid. J. H. Sandground and Charles R. Hamilton ........................................ 203


NEW ORLEANS, JULY, 1943

XXVIII. The Effect of Sodium Diphenyl Hydantoinate (Dilantin Sodium) on the Utilization of Ascorbic Acid by Guinea Pigs. A. D. Emmett, Eva R. Hartzler and R. A. Brown ........................................ 215

XXIX. Studies on the Chemistry and Pharmacology of the Melanophore Hormone of the Pituitary Gland. Graham Chen and Eugene M. K. Geiling ........................................ 222

XXX. Studies on Veratrum Alkaloids. III. Qualitative and Quantitative Differences in the Action of Cevine and Veratridine. Rafael Mendez and Gonzalo Montes ........................................ 238

XXXI. Chronic Selenium Poisoning in Dogs and Its Prevention by Arsenic. Morris Rhan and Alvin L. Moxon ........................................ 249

XXXII. Dihydroxypropyl Bismuthate: Experimental Studies of a New Bismuth Compound. Larry M. Wheeler ........................................ 265

XXXIII. The Effect of Cholesterol Administration on Anesthesia. Francis F. Foldes and Henry K. Beecher ........................................ 276

XXXIV. The Treatment of Standardized and Graded Histamine Shock in Dogs with Solutions of Methyl Cellulose and S-Methyl Isothiourea Sulfate. W. C. Hueper and C. T. Ichniowski ........................................ 282

XXXV. Narcosis Induced by Carbon Dioxide at Low Environmental Temperatures. J. H. Barbour and M. H. Seevers ........................................ 296


XXXVII. Studies on Antimalarial Drugs. The Distribution of Quinine in the Tissues of the Fowl. F. E. Kelsey, Frances K. Oldham and E. N. K. Geiling ........................................ 314

NUMBER 4, AUGUST, 1943

XXXVIII. Blood Pressure and Respiratory Changes Produced by Strychnine Convulsions. B. E. Abreu and R. A. Woodbury ........................................ 321

XXXIX. Effect of Cocaine on the Inactivation of Epinephrine and Sympathin. Clara Torda ........................................ 331

XL. The Influence of Low Concentrations of Cocaine on the Metabolism of Phenol. Clara Torda ........................................ 336
CONTENTS

XL. The Comparative Toxicity of Chloral Alcohohate and Chloral Hydrate. W. Lloyd Adams.......................... 340

XLI. The Absorption of Quinine Sulfate and Quinine Dihydrochloride from Isolated Intestinal Loops of Dogs. James C. Andrews and Carl E. Anderson.................. 346

XLII. The Absorption Rates of Insulin, Globin Insulin and Protamine Zinc Insulin Labelled with Radioactive Iodine. L. Reiner, E. H. Lang, John W. Irvine, Jr., Wendell Peacock and Robley D. Evans........... 352

XLIII. The Effects of Anesthetic Agents on Muscular Contraction. E. G. Gross and Stuart C. Cullen................................. 358

XLIV. The Fate of Sulfonamides and p-Aminobenzoic Acid in Cold-blooded Animals. Robert B. Failey, Jr., Robert C. Anderson, Francis G. Henderson and K. K. Chen........................................ 366

XLV. The Action of Riddelline. Paul N. Harris, Robert C. Anderson and K. K. Chen........................................ 372

XLVI. The Inactivation of Cholinesterase by Morphine, Dilaudid, Codeine and Desomorphine. C. I. Wright and Jean C. Sabine....... 375

XLVII. The Reduction of 2,4,6-Trinitrotoluene by Animal Tissue in vitro. Benton B. Westfall........................................ 386

XLVIII. The Reduction of 2,4,6-Trinitrotoluene by Animal Tissue in vitro. Benton B. Westfall........................................ 386

XLIX. The Conjugation in vitro of Phenol by Guinea Pig Liver. Frederick Bernheim and Mary L. C. Bernheim.................. 394

L. Effect of Anesthesia on Lymph Flow (Local Procaine, Ether, Pentobarbital Sodium). Hugo Polderman, Jane D. McCarrell and Henry K. Beecher. 400

LI. Index........................................................................ 407