CONTENTS

NUMBER 1, JANUARY, 1957

I. The Metabolic Conversion of 5,5-Diphenyl Hydantoin to 5-(p-Hydroxyphenyl)-5-Phenyl Hydantoin. Thomas C. Butler ......................... 1

II. Some Liver Enzymes During Dicumarol Treatment and Vitamin K-De-

  ficiency. Jack Peter Green, Ebbe Sondergaard and Henrik Dam .... 12

III. The Effect of Disulfiram on the Action and Metabolism of Paraldehyde.

  M. L. Keplinger and J. A. Wells ........................................ 19

IV. Pharmacology of Ethyl - 1 - (4 - Aminophenethyl) - 4 - Phenylisonipeco-

  tate, Anileridine, a New Potent Synthetic Analgesic. Peter D. Orarovats,

  Edward G. Lehman and Edward W. Chapin .................................. 26

V. The Passage of Thiopental into Brain. Lester C. Mark, J. J. Burns, C. Ines

  Campomanes, S. H. Ngai, Natalie Trousof, E. M. Papper and Bernard

  B. Brodie ................................................................. 35

VI. Antagonism Between a Bis-Quaternary Oxamide, WIN 8078, and Depolariz-

  ing and Competitive Blocking Agents. Alexander G. Karezmar ............................ 39

VII. Alterations in Somatic Afferent Transmission Through the Thalamus by

  Central Mechanisms and Barbiturates. Ellen Eva King, Robert Naquet

  and H. W. Magoun .......................................................... 48

VIII. Spectrophotometric Estimation of Amphenone in Biologic Material and Its

  Absorption and Excretion in Man. James A. Pittman and Benton B.

  Westfall ................................................................. 64

IX. A Peripheral Action of Reserpine. Robert A Maxwell, Samuel D. Ross,

  Albert J. Plummer and Ernst B. Sigg .................................... 69

X. Toxicity and Effects of Increasing Doses of Mesaline. Louise B. Speck .... 78

XI. Blood and Hemodynamic Changes in Dogs Following Hemorrhagic Hypo-

  tension and Its Treatment with Dextran. R. A. Waud .......................... 85

XII. The Effect of Copper Ions and Certain Thioureas on Enzyme Induction

  and Ammonia Assimilation in a Mycobacterium. Frederick Bernheim .......................... 93

XIII. Mechanisms for Cardiac Slowing by Methoxamine. Domingo M. Aviado,

  Jr. and A. L. Wnuck ..................................................... 99

XIV. Pharmacologic Studies with 8-(Para-Aminobenzyl)-Caffeine and Certain

  Related Compounds. Raymond M. Burgison, W. Edward O'Malley,

  Claire K. Heiss and John C. Krantz, Jr ................................. 107

XV. The Effects of Serotonin (5-Hydroxytryptamine) on Renal Hemodynamics.

  Angelo J. Spinazzola and Theodore R. Sherrod .................................. 114

XVI. The Influence of Some Basic Substances on the Transport of Tetraethyl-

  ammonium Ion. A Farah, B. Rennick and M. Frazer ............................ 122

NUMBER 2, FEBRUARY, 1957

XVII. Abstracts of Papers .................................................................. 129

XVIII. The Enzymatic Reduction of Chloramphenicol, P-Nitrobenzoic Acid and

  Other Aromatic Nitro Compounds in Mammals. James R. Fouts and

  Bernard B. Brodie ........................................................... 197

XIX. Studies on the Toxicity and Pharmacologic Actions of the Dimethoxy Ester

  of Benzotriazine Dithiophosphoric Acid (DBD, Guthion). Kenneth P.

  DuBois, Donald R. Thurah and Sheldon D. Murphy ............................... 208

XX. Effects of Mephentermine on Cerebral Metabolism and Circulation. David

    W. Richardson, Robert W. Ferguson and John L. Patterson, Jr ............... 219

XXI. The Antagonistic Action of Sparteine upon the Veratrine Response. Jaime

    Fuentes ................................................................. 225
XXII. Cardiac Glycosides in Traumatic Shock. Alexander C. Keyl and William C. North .......................................................... 229

XXIII. The Influence of Some Alcohols on the Uptake of Tetraethylammonium Ion by Renal Slices of the Dog. A. Farah and M. Fraser .......................... 233

XXIV. Effects of d-Lysergic Acid Diethylamide and its Brom Derivative on Cardiovascular Responses to Serotonin and on Arterial Pressure. G. C. Salmoiraghi, J. W. McCubbin and Irvine H. Page ........................................ 240


XXVI. Convulsant Hydrazides I. In Vitro and In Vivo Inhibition of Vitamin B12 Enzymes by Convulsant Hydrazides. K. F. Killam and J. A. Bain .... 255

XXVII. Convulsant Hydrazides II. Comparison of Electrical Changes and Enzyme Inhibition Induced by the Administration of Thiosemicarbazide. K. F. Killam ................................................................. 263

XXVIII. Pharmacological Actions of a Convulsant Barbiturate II. Effects Compared with Pentobarbital on Cerebral Cortex and Some Brain Stem Systems of the Cat. Edward F. Domino .................................. 272

XXIX. Experimental Chemotherapy of Influenza Virus with Particular Reference to Thiosemicarbazones and Diphenyl Compounds. Gertrude Sheva Lum and Paul K. Smith .............................................................. 284

XXX. Bioassay of Potential Ataraxic Agents Against Audiogenic Seizures in Mice. N. P. Plotnikoff and D. M. Green ............................................ 294

NUMBER 3, MARCH, 1957


XXXII. The Hypothalamus as an Intermediary for Pituitary-Adrenal Activation by Aspirin. Robert George and E. Leong Way ........................................ 310

XXXIII. Effects of Some Tranquilizing and Depressant Drugs on Conditioned Avoidance Behavior in Monkeys. R. P. Smith, A. I. Wagman, W. Wagman, C. C. Pfeiffer and A. J. Riopelle ........................................ 317

XXXIV. Veratrum Hypotension Due to Reflexes of Pulmonary Origin. John C. Rose and Eric J. Lazaro ................................................................. 324

XXXV. The Respiratory Activity of Certain Neuromuscular Blocking Compounds: a Direct Peripheral and Central Comparison. Richard L. Irwin and Jay B. Wells ................................................................. 329

XXXVI. Studies on Behavior. III. Effects of Scopolamine on Reversal of a Discriminatory Performance in Pigeons. Peter B. Dews ................. 343

XXXVII. Detection of Alterations in Central Nervous System and Skeletal Muscle Activity. I. M. Toekes ................................................................. 354


XXXIX. The Gastric Secretion of Drugs: a pH Partition Hypothesis. Parkhurst A. Shore, Bernard B. Brodie and C. Adrian M. Hogben ................. 361

XL. Subjective Effects of Nalorphine in Hospitalized Patients. Arthur S. Keats and Jane Telford ................................................................. 370

XLI. Plasma Concentrations of Epinephrine and Norepinephrine During Anesthesia. J. A. Richardson, E. F. Woods and A. K. Richardson ................. 378

XLII. Effects of Normal Air and Dextro-Amphetamine upon Work Decrement Induced by Oxygen Impoverishment and Fatigue. G. T. Hauty, R. B. Payne and R. O. Bauer ................................................................. 385
XLIII. Agents Affecting Apomorphine-Induced Vomiting. Eldon M. Boyd and Wilfred A. Cassell

XLIV. Comparative Effects of Various Rauwolfia Alkaloids on Centrally Evoked Vasopressor Responses. K. F. Bhargava and H. L. Borison

XLV. Comparative Studies of Emesis in Pigeons and Dogs. Rudolf Koster

XLVI. A Potent New Uricosuric Agent, the Sulfoxide Metabolite of the Phenylbutazone Analogue, G-25671. J. J. Burns, T. F. Y, Arnold Ritterband, James M. Perel, Alexander B. Gutman and Bernard B. Brodie

XLVII. The Antiaccelerator Effect of Sparteine on the Heart-Lung Preparation of the Dog. Jaime Fuentes

XLVIII. Quantitative Assay of Insulin in Blood Plasma in Normal and Alloxanized Dogs by Rat Diaphragm Method. Setsuya Takeuchi, Shigeru Ohashi and Yoshito Kobayashi

XLIX. Histamine Toxicity in Mice and Rats Following Treatment with Histaminase Inhibitors. Evangelos T. Angelakos and Earl R. Loew

NUMBER 4, APRIL, 1957

L. Modifications of the Pharmacology of Reserpine and Serotonin by Iproniazid. Max Chessin, Edward R. Kramer and Charles C. Scott


LII. Pharmacology of Carbutamide (p-Aminophenylsulfonyl Butylcarbamide). Mary A. Root


LVI. The Effect of Preoperative Medication with Morphine on Postoperative Analgesia with Morphine. Joachim S. Gravenstein and Henry K. Beecher

LVII. Studies on the Utilization of Uniformly Labeled C-14-Glucose by Rats Given Tolbutamide (Orinase). William L. Miller, Jr., John J. Krake and Milton J. Vander Brook


LIX. The Oxidation of Drugs by Liver Microsomes: on the Role of TPNH and Oxygen. James R. Gillette, Bernard B. Brodie and Bert N. La Du

LX. The Action of Ambenonium (WIN 8077) and Related Compounds in the Mouse. A. M. Lands, J. O. Hoppe, A. G. Karezmar and Aaron Arnold

LXI. Observations Concerning the Renal Tubular Transport Characteristics of Three Quaternary Bases in Dogs. Alexander Kandel and Lawrence Peters

LXII. A Method for the Biological Assay of Reserpine and Reserpine-like Activity. Graham Chen and Barbara Bohner

LXIII. Reaction Rate and Oral Effectiveness of Certain Adrenergic Blocking Compounds. Richard A. McLean, James F. Kerwin and Edwin J. Fellows

LXIV. Enzymatic Conversion of the Dimethoxy Ester of Benzotriazine Dithiophosphoric Acid to an Anticholinesterase Agent. Sheldon D. Murphy and Kenneth P. DuBois