

J. P. ...
 - of Psy...
 713
 2018

CONTENTS

NUMBER 1, MAY, 1937

I. Atropine and Syntropan. A Comparative Study. K. Fromherz.	1
II. The Relationship Between Age and the Action of Atropine and Morphine. H. A. Schlossmann.	14
III. The Circulatory Failure Associated with Guanidine Intoxication. A. S. Minot and Margaret Keller.	32
IV. Effect of Continuous Venoclysis in Dogs with Guanidine Intoxication. A. S. Minot and Margaret Keller.	45
V. On the Pharmacology of Phenylisopropylamine (Benzedrine). L. E. Detrick, Ralph Millikan, F. S. Modern and C. H. Thienes.	56
VI. Actions of Erythrina Americana, a Possible Curare Substitute. A. J. Lehman.	69
VII. The Alleged Antidiuretic Action of the Pigmentary Hormones of the Pituitary Gland. A. M. Fraser.	82
VIII. The Diuretic Action of the Oxytocic Hormone of the Pituitary Gland and its Effect on the Assay of Pituitary Extracts. A. M. Fraser.	89

NUMBER 2, JUNE, 1937

IX. The Scientific Proceedings of the American Society for Pharmacology and Experimental Therapeutics, Incorporated.	97
X. A Pharmacologic Study of Certain Thiobarbiturates. O. M. Gruhzit, A. W. Dox, L. W. Rowe and M. C. Dodd.	125
XI. The Effects of Anesthetic Doses of Sodium Thio-Pentobarbital, Sodium Thio-Ethamyl and Pentothal Sodium upon the Respiratory System, the Heart and Blood Pressure in Experimental Animals. Charles M. Gruber.	143
XII. The Pharmacology of Meta-Synephrin. Eldon M. Boyd.	174
XIII. Studies on Calcium Creosotate. II. The "in Vitro" Comparative Study of the Efficiency of Calcium Creosotate, Calcium Guaiacolate and Creosote as Bactericidal Agents. Edwin J. Fellows.	178
XIV. Studies on Calcium Creosotate. III. The Elimination of Volatile Phenols in Rabbit Urine after the Administration of "Calcium Creosotate Solution" and after Creosote Solution. Edwin J. Fellows.	183
XV. A Comparative Study of Several Ultrashort-acting Barbiturates, Nembutal, and Tribromethanol. H. W. Werner, T. W. Pratt and A. L. Tatum.	189
XVI. The Pharmacological and Toxic Actions of Dextro- and Laevo-Miotine. A. C. White and E. Stedman.	198

- XVII. An Investigation of the Possible Protective Action of Calcium Gluconate in Aspirin Poisoning. Henry G. Barbour and Janet A. Porter..... 224
- XVIII. The Action of Morphine and its Derivatives on Contractions of Leech Muscle Due to Acetyl-Choline, Choline and Nicotine. J. H. Quastel and M. Tennenbaum..... 228

NUMBER 3, JULY, 1937

- XIX. Reticulocytosis in the Guinea Pig. I. The Use of Standard Guinea Pigs in the Assay of Anahaemin. M. M. O. Barrie..... 235
- XX. Reticulocytosis in the Guinea Pig. II. The Haematopoietic Response of "Reactive" Guinea Pigs to Anahaemin and Other Substances. M. M. O. Barrie..... 245
- XXI. The Effect of Galactose on the Metabolism of Ethyl Alcohol in Man. Thorne M. Carpenter and Robert C. Lee..... 254
- XXII. The Effect of Glucose on the Metabolism of Ethyl Alcohol in Man. Thorne M. Carpenter and Robert C. Lee..... 264
- XXIII. The Effect of Fructose on the Metabolism of Ethyl Alcohol in Man. Thorne M. Carpenter and Robert C. Lee..... 286
- XXIV. Human Autonomic Pharmacology. X. The Synergism of Prostigmin and Mecholyl. Abraham Myerson, Max Rinkel, Julius Loman and Paul Myerson..... 296
- XXV. Propylene Glycol: Rate of Metabolism Absorption and Excretion, with a Method for Estimation in Body Fluids. A. J. Lehman and H. W. Newman..... 312
- XXVI. Studies upon the Sex-Difference in Rats in Tolerance to Certain Barbiturates and to Nicotine. Harald G. O. Holck, Munfr A. Kanán, Lucille M. Mills and Edwin L. Smith..... 323
- XXVII. Methods of Anesthetizing Chimpanzees. J. H. Elder..... 347
- XXVIII. Chemical Studies on Mocassin Venom. I. Some Properties of the Hemorrhagic and Hemolytic Components. Samuel M. Peck and Walter Marx..... 358

NUMBER 4, AUGUST, 1937

- XXIX. Some Unsymmetrical Alkylaryl Ureas. II. Preparation, Physical Properties and Hypnotic Effects. Johannes S. Buck, Axel M. Hjort, Edwin J. de Beer, Clayton W. Ferry and Walter S. Ide..... 369
- XXX. Insulin Treatment of Morphine Abstinence Symptoms. An Experimental Evaluation. Eugene J. Stanton..... 387
- XXXI. Studies on Coronary Circulation. V. Effect of Pyridine- β -carboxylic Acid Diethylamide (Coramine) and Pentamethylenetetrazol (Metrazol) on Coronary Circulation. O. O. Stoland and A. M. Ginsberg..... 396
- XXXII. Uterine Stimulating, Depressor, and Bladder Contracting Activities in Extracts of Submaxillary Gland of Rat. George F. Koepf and J. F. Mezen..... 407

CONTENTS

V

XXXIII. Oestrogenic Potency of Orally Administered Oestriolglucuronide. Arthur Duston Odell, Dorothy Irene Skill and Guy Frederic Marrian.....	420
XXXIV. Analysis of Cardiac Irregularities Produced by Calcium, and Their Prevention by Sodium Amytal. H. E. Hoff and L. H. Nahun.....	425
XXXV. Effect of Ephedrine on Absorption from Small Intestine. Edward J. Van Liere, David Northup and Clark K. Sleeth.....	434
XXXVI. Study of Toxic and Anesthetic Properties of Sodium n-hexylethyl Barbiturate (Ortal Sodium) in Experimental Animals. Charles M. Gruber and John T. Brundage.....	439
XXXVII. Toxicity and Pathology of Selenium. M. I. Smith, E. F. Stohman and R. D. Lillie.....	449
XXXVIII. Picrotoxin as Respiratory Stimulant. E. K. Marshall, Jr., Edward M. Walzl and D. H. Le Messurier.....	472
XXXIX. Index.....	487

ILLUSTRATIONS

Salivary secretion (fig. 1).....	7
Effect of acetylcholine, atropine and syntropan on blood pressure of cat (fig. 2).....	9
— of acetylcholine, atropine and syntropan on isolated rabbit intestine (figs. 3 and 4).....	11
Mortality curves for atropine sulphate in rabbits in first month of life and in older rabbits (fig. 1).....	20
Influence of atropine on rate of heart beat and of respiration related to non-lethal doses of atropine (fig. 2).....	24
Mortality curves for rabbits in first and second weeks of life and for rabbits older than two months (fig. 3).....	28
Effect of benzedrine sulphate on isolated cat ileum (fig. 1).....	59
— of benzedrine on isolated cat ileum (fig. 2).....	60
— of benzedrine on isolated cat ileum (fig. 3).....	61
— of benzedrine on isolated cat duodenum (fig. 4).....	62
— of benzedrine on isolated rabbit ileum (fig. 5).....	63
Typical effects of erythrina on contractions of diaphragm and blood pressure in cat (fig. 1).....	76
Effect on respiration of thiobarbiturate administration in dog (fig. 1).....	135
— on respiration and blood pressure of thiobarbiturate administration in dog (fig. 2).....	136
— on respiration, blood pressure, and heart action of thiobarbiturate administration in dog (figs. 3 and 4).....	137
Changes in respiration following injection of pentothal sodium in rabbit, cat, and monkey (fig. 1).....	150
Electrocardiogram showing effect of thiobarbiturate on respiration and heart action of dog (fig. 2).....	152
— taken 55 minutes later than figure 2 (fig. 3).....	153
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 4).....	154
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 5).....	157
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 6).....	159
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 7).....	161
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 8).....	162
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 9).....	163
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 10).....	167

Electrocardiogram showing effect of thiobarbiturate on respiration and heart action of dog (fig. 11)	168
— showing effect of thiobarbiturate on respiration and heart action of dog (fig. 12)	170
Actions of dextro- and laevo-miotine on blood pressure in cat (fig. 1)	205
Miotic action in cat, goat and fowl (fig. 2)	208
Actions of dextro- and laevo-miotine on isolated rabbit vas deferens (fig. 3) ..	210
— of dextro- and laevo-miotine on rabbit vas deferens (figs. 4 and 5)	211
— of dextro- and laevo-miotine on guinea pig uterus (fig. 6)	213
— of dextro- and laevo-miotine on leech muscle (fig. 7)	215
Duration and amounts of alcohol in expired air after ingestion of alcohol plus galactose (fig. 1)	255
Amounts of alcohol in expired air after ingestion of alcohol plus glucose (fig. 1) ..	270
Changes in respiratory quotient in successive periods after ingestion of glucose and after ingestion of sugar plus alcohol (fig. 2)	274
Duration and amounts of alcohol in expired air after ingestion of alcohol plus fructose (fig. 1)	287
Effect of injection of mecholyl and synergistic effect of prostigmin when combined with mecholyl on free HCl and gastric juice production (fig. 1) ..	302
— of mecholyl iontophoresis alone and effect of mecholyl iontophoresis when combined with prostigmin on gastric free HCl and gastric juice production (fig. 2)	303
— of injection of mecholyl, of injections of prostigmin, and of combinations of these drugs on blood pressure and pulse rate (fig. 3)	306
— of prostigmin alone and of mecholyl and prostigmin in combination on blood pressure and pulse rate (fig. 4)	310
Blood propylene glycol concentration in dogs following administration of propylene glycol (fig. 1)	317
Rate of disappearance and concentration of propylene glycol in blood of normal and nephrectomized dogs (fig. 2)	319
Comparative average recovery times after administration of sodium evipal and of sodium barbital (chart 1)	331
Average recovery times after administration of sodium evipal (chart 2)	333
Comparative average recovery times after administration of sodium evipal (chart 3)	337
— average recovery times after administration of sodium evipal (chart 4) ..	338
Anesthetizing chamber; also chimpanzee cooperating in process of rectal injection (fig. 1)	349
Minimum hypnotic and minimum lethal doses of some unsymmetrical alkylaryl ureas (fig. 1)	375
Time relationships of various phases of intoxications induced by minimum hypnotic doses of some unsymmetrical alkylaryl ureas (fig. 2)	376
Relationships between melting points, chemical constitution and minimum hypnotic and minimum lethal doses of some unsymmetrical alkylaryl ureas (fig. 3)	278
— between Distribution coefficients, chemical constitution and minimum hypnotic and minimum lethal doses of some unsymmetrical alkylaryl ureas (fig. 4)	381

Rate of coronary flow and blood pressure in dog's heart-lung preparation after adding 1 cc. coramine to circulating blood (fig. 1)	399
— of coronary flow and blood pressure in dog under ether anesthesia following intravenous injection of 1.5 cc. coramine (fig. 2)	402
Effect of tissue extracts on isolated cat bladder and rat uterus (fig. 1)	409
— of submaxillary gland of rat, mouse, and cat on rat uterus (fig. 2)	410
— of submaxillary gland of rat on blood pressure of etherized cat (fig. 3)	411
Heat destruction curve of uterine principle of submaxillary gland of rat (fig. 4)	413
Effect of acetylcholine and submaxillary gland of rat on rat uterus before and after atropine and effect of acetylcholine and submaxillary gland of rat on leech muscle (fig. 5)	415
Oestrogenic potency of orally administered oestriolglucuronide (fig. 1)	422
Cardiac irregularities produced by calcium and prevention by sodium amytal (fig. 1)	427
— irregularities produced by calcium and prevention by sodium amytal (fig. 2)	428
— irregularities produced by calcium and prevention by sodium amytal (figs. 3 and 4)	429
— irregularities produced by calcium and prevention by sodium amytal (fig. 5)	430
Curve plotted from data obtained on 62 rats which received sodium n-hexylethyl barbiturate intraperitoneally (fig. 1)	441
— plotted from data obtained from 275 observations on rats which received sodium n-hexylethyl barbiturate (fig. 2)	443
Mortality curve of 29 rats on adequate synthetic diet containing 50 parts per million selenium as sodium selenite (fig. 1)	455
Effect of picrotoxin on respiration (fig. 1)	474
— of picrotoxin on respiration (figs. 2 and 3)	475
— of picrotoxin on respiration (figs. 4 and 5)	483