CONTENTS

NUMBER 1, FEBRUARY, 1924

II. Pharmacological Action of Primary Albumose in Unanesthetized Dogs. By E. M. K. Geiling and A. C. Kolls ........................................ 29
III. Some Active Principles of Peptone. By A. J. Clark .......................... 45
IV. On Drug-Resistance of Trypanosomes with Particular Reference to Arsenic. By Carl Voegtlin, Helen A. Dyer and D. Wright Miller ............ 55

NUMBER 2, MARCH, 1924

V. Artificial Pyrexia Induced in Rabbits by Injections of Plant Nucleic Acid. By Florence McCoy Hill ............................................. 87
VI. The Influence of Insulin on Phlorhizin Poisoning. By Carl. F. Cori ............................................. 99
VII. The Relation of the Chemical Constitution of Certain Organic Arsenical Compounds to Their Action on the Optic Tract. By A. G. Young and A. S. Loevenhart ............................................. 107
VIII. The Effect of Compounds Related to Hydrazine in Producing Anhydremia and Experimental Anemia. By Meyer Bodansky .................. 127
IX. Scientific Proceedings of the American Society for Pharmacology and Experimental Therapeutics ............................................. 135

NUMBER 3, APRIL, 1924

X. The Effect of Alcohol on the Patellar Tendon Reflex. By W. W. Tuttle ............................................. 163
XI. Further Observations on Anaphylactoid Phenomena from Various Agents Injected Intravenously. By Paul J. Hanzlik and Howard T. Karsner ............................................. 173
XII. Effects from the Intrapitoneal Injection of Various Agents Causing Anaphylactoid Phenomena. By Paul J. Hanzlik and Howard T. Karsner ............................................. 243
XIII. A Quantitative Protozoöcidal Comparison of Some Opium Alkaloids. By Charles E. Bills and David I. Macht ............................................. 261

NUMBER 4, MAY, 1924

XIV. The Pharmacology of Phoradendron flavescens (American mistletoe). By P. J. Hanzlik and W. O. French ............................................. 269
XV. Factors Affecting the Susceptibility of Frogs to the Convulsant Action of Acid Fuchsin. By J. E. Thomas ............................................. 307
XVI. Studies in Fatigue. XIV. The Effect of Adrenalin on the Duration of the Latent, the Contraction and the Relaxation Periods of Skeletal Muscle at Rest and Undergoing Fatigue. By Charles M. Gruber .......... 335
XVII. A Preliminary Note on the Properties of an Alleged Erythropoietic Hormone. By Chauncey D. Leake and Franklin J. Bacon .......... 333
XVIII. The Seat of the Mydriatic Action of Cocain. By Harry Gold .... 365
XX. A New Method of Testing Liver Function with Phenoltetrachlorphthalein. IV. The Relations of Impaired Function to the Amount of Normal Liver Tissue. By Sanford M. Rosenthal .......................... 385
XXI. The Action of Quinine on Protein Metabolism, Respiratory Exchange and Heat Function. I. Protein Metabolism. By S. W. Hardikar .... 395
XXII. Studies of Chronic Intoxications on Albino Rats. VII. Local Anesthetics; Morphine Group; Chloral. By Torald Sollmann ........... 449
XXIII. The Excretion of Tryparsamide. By A. G. Young and C. W. Muehberger ............................................ 461
XXIV. Renal Tolerance of Caffein. By Harold B. Myers ............... 465
XXV. Cross Tolerance: Decreased Renal Response to Theobromin and Theophyllin in Rabbis Tolerant Toward Caffein. By Harold B. Myers 477
XXVI. Experiments with Anesthetic Gases Propylene, Methane, DimethylEther. By W. Easson Brown ............................ 484
ILLUSTRATIONS

Blood pressure tracings showing the depressor action obtained after each of repeated injections of small amounts of the alcohol soluble fraction of Witte peptone and of histamine phosphate (Fig. 1) .......................... 13
Tracings showing the blood pressure and respiratory changes induced by the injection of 2 cc. = 0.120 gram of the crude alcohol soluble fraction of Witte peptone (Fig. 2) ............................. 14
— showing the blood pressure and respiratory changes induced by the injection of 2 cc. = 0.120 gram of the alcohol soluble fraction of Witte peptone (Fig. 3) ............................. 15
Chart showing changes in systolic and diastolic blood pressures, and in the pulse rate in an unanesthetized dog induced by the intravenous injection of 200 mgm. of primary albumose per kilo body weight (Fig. 1) .... 34
— showing changes in systolic and diastolic blood pressure and in the mean blood pressure in an anesthetized dog (sacrifice experiment) produced by the intravenous injection of 200 mgm. of primary albumose per kilo body weight (Fig. 2) ............................. 35
Photomicrographs of the capillaries in the ear of an unanesthetized dog (Fig. 3) ............................. 38
Roentgenograms of unanesthetized dog's heart showing the effect of the intravenous injection of 200 mgm. of primary albumose per kilo body weight (Fig. 4) ............................. 39
Diagram of Roentgenograms of the dog's heart as illustrated in figure 4 (Fig. 5) ............................. 40
Action of peptones, etc., upon the isolated uterus of the rat (Fig. 1) .................. 49
Transfers of normal strains of Trypanosoma equiperdum through arsphenamine-treated rats and resistance of resulting strains to arsphenamine (Chart 1) ............................. 62
Drug-resistance of trypanosomes (Chart 2) ............................. 65
Average rise in temperature induced by 66 injections in 22 animals (Fig. 1) .... 96
— rise in temperature, preceded by initial drop, induced by 36 injections in 17 animals (Fig. 2) ............................. 96
Effect of alcohol on the knee-jerk (Fig. 1) ............................. 166
— of alcohol upon the knee-jerk (Fig. 2) ............................. 167
Curves showing a comparison of the effect of alcohol upon the knee-jerk of different subjects (Fig. 3) ............................. 170
Thrombus rich in fibrin in small pulmonary artery (Fig. 1) ............................. 194
— in a small pulmonary artery following injection of 10 per cent NaCl solution (Fig. 2) ............................. 194
— in small pulmonary artery following injection of ricin (Fig. 3) ............................. 195
Capillary completely plugged with platelets and distended, following intra-peritoneal injection of histamin (Fig. 1) ............................. 252
ILLUSTRATIONS

Effects of alcoholic fluid extract of mistletoe on cardiac volume, spleen and kidney volumes, urine flow and blood pressure (Fig. 1) .......................... 273
— of aqueous fluid extract of mistletoe on urine flow, respiration, kidney volume and blood pressure (Fig. 2) ................................................................. 274
Effect of mistletoe on the blood pressure following paralysis of the vagi endings by atropine (Fig. 3) ................................................................. 277
Perfusion of mistletoe through frog's vessels (Fig. 4) ................................... 279
Effects of mistletoe, tyramine and epinephrine on blood pressure in ergotized dog (Fig. 5) ................................................................. 281
— of alcoholic fluid extract of mistletoe and of 0.09 per cent NaCl on intact uterus and blood pressure of a curarized cat (Fig. 6) .......................... 296
— of different concentrations of fluid extracts of mistletoe on the same strip of excised virgin uterus of guinea-pig in 50 cc. Tyrode's solution at 38°C. (Fig. 7) ................................................................. 297
— of fluid extract of mistletoe on excised strip of pregnant guinea-pig uterus after treatment with nicotine, apocodeine and atropine; also antagonism of augmented tonus from mistletoe by chelidonine (Fig. 8) .... 298
— of alcoholic fluid extract of mistletoe (1:250) on strip of excised rabbit's intestine in 50 cc. Tyrode's solution at 38°C. (Fig. 9) .......................... 299
Non-fatigued intact muscle (Fig. 1) .......................................................... 340
Resting intact muscle (Fig. 2) ................................................................. 340
Perfused isolated left tibialis anticus muscle of kitten weighing 1.5 kgm. (Fig. 3) ................................................................. 341
Curves plotted from the averaged results obtained from experiments upon 16 cats under ether anesthesia (Chart 1) ................................................................. 343
Conditions same as in Chart I, 31 animals being used (Chart II) ............... 344
— same as in Chart I, 8 animals used (Chart III) ....................................... 346
Intact active muscle of cat (Fig. 4) .......................................................... 347
— same as figure 4 (Fig. 5) ................................................................. 347
— animal as figure 5 (Fig. 6) ................................................................. 348
Frog heart perfused with adrenalin, 1:80,000,000 Ringer's solution with pH 7.9 (Fig. 1) ................................................................. 377
— heart perfused with adrenalin, 1:20,000,000 Ringer's solution with pH 6.5 (Fig. 2) ................................................................. 379
Curves of disappearance of phenoltetrachlorphthalein from the blood stream of 11 normal rabbits (Fig. 1) ................................................................. 386
Disappearance of tetrachlorphthalein from the blood before and after removal of one-tenth of the entire liver (Fig. 2) ................................................................. 387
Curves of disappearance of tetrachlorphthalein from the blood stream of rabbits (Fig. 3) ................................................................. 388
Composite curves arranged from figure 3 (Fig. 4) ....................................... 390
Hourly excretion of nitrogen in urine (Fig. 1) ........................................... 441
— excretion of nitrogen in urine (Fig. 2) ............................................... 441
— excretion of nitrogen in urine (Fig. 3) ............................................... 444
— excretion of nitrogen in urine (Fig. 4) ............................................... 444
Condition of tadpoles treated with thyroid and quinine (Fig. 5) ................ 447
Cocaine on the growth of rats (Fig. 1) ..................................................... 451
Procaine on the growth of rats (Fig. 2) ..................................................... 453
ILLUSTRATIONS

Synthetic anesthetics on the growth of rats (Fig. 3) ......................... 453
Morphine on the growth of rats (Fig. 4) ........................................ 455
Codein on the growth of rats (Fig. 5) ........................................... 455
Heroin on the growth of rats (Fig. 6) ............................................ 456
Chloral on the growth of rats (Fig. 7) ............................................ 457
Rate of excretion of arsenic in four individuals (Chart 1) .................. 462
--- development of renal caffeine tolerance (Fig. 1) .......................... 466
Caffein, 0.5 mgm. per kilogram weight, injected intravenously during break
in curve (Fig. 2) ................................................................................ 469
--- 0.5 mgm. per kilogram weight, injected intravenously during break
in curve (Fig. 3) ................................................................................ 469
--- 0.6 mgm. per kilogram weight, injected intravenously during the break
in the curve (Fig. 4) ........................................................................... 470
--- 1.3 mgm. per kilogram, injected intravenously (during the break in the
curve) in caffeine tolerant rabbits (Fig. 5) ........................................ 470
--- 1.4 mgm. per kilogram weight, injected intravenously in caffeine tolerant
rabbits (Fig. 6) .................................................................................... 471
Theobromin, 1.5 mgm. per kilogram, injected intravenously in control rabbit
during the break in the curve (Fig. 7) ................................................. 479
--- 1 mgm. per kilogram weight, injected intravenously in control rabbit
during the first break in the curve; followed by a second injection of 0.5
mgm. per kilogram during the second break (Fig. 2) ........................... 479
--- 2.2 mgm. per kilogram weight, injected intravenously in a caffeine toler-
ant rabbit during the break in the curve (Fig. 3) ............................... 480
--- 2.3 mgm. per kilogram weight, injected intravenously into a caffeine
tolerant rabbit during the break in the curve (Fig. 4) ......................... 480
Theophyllin, 0.2 mgm. per kilogram weight, injected during the break in the
curve, in ear vein of control rabbit (Fig. 5) ....................................... 481
--- 0.4 mgm. per kilogram weight, injected during the break in the curve
into an ear vein of a caffeine tolerant rabbit (Fig. 6) ......................... 482
--- 0.5 mgm. per kilogram weight, injected intravenously during the break
in each curve (Fig. 7) ......................................................................... 482