CONTENTS

NUMBER 1, JUNE, 1909

Editorial Announcement

I. The Comparative Toxicity of the Chlorides of Magnesium, Calcium, Potassium and Sodium. By Don R. Joseph and S. J. Meltzer .......................... 1


III. Studies in Tolerance: II. Strychnine. By Worth Hale ............. 39

IV. The Mechanism of Haemolysis with Special Reference to the Relations of Electrolytes to Cells. By G. N. Stewart .......................... 49

V. Studies Concerning the Iodine-containing Principle of the Thyroid Gland: I. Pharmacological Action and Therapeutic Behavior of Diiodotyrosin. By S. Strouse and C. Voegtlin .................. 123

VI. The Antagonism of the Adrenal Glands against the Pancreas. By Charles Wallis Edmunds .......................................................... 135

VII. Quantitative Experiments with the Cutaneous Tuberculin Reaction. By Clemens F. von Pirquet .................. 151

NUMBER 2, AUGUST, 1909

VIII. Some Convenient Laboratory Apparatus. By Albert C. Crawford and Harlan Verne Honn .......................................................... 175

IX. The Effects of Caffeine and Sodium Bicarbonate upon the Toxicity of Acetanilide. By Worth Hale .................. 185

X. Anaesthesia by the Intracerebral Injection of Magnesium Chloride. By V. E. Henderson .......................................................... 199

XI. Ergot. By W. H. Cronyn and V. E. Henderson .......................... 203

XII. On the Pharmacological Action of Some Phthaleins and Their Derivatives, with Special Reference to Their Behavior as Purgatives: I. By John J. Abel and L. G. Rowntree .......................... 231

XIII. Clavin, Vahlen's Active Constituent of Ergot. By Donald D. Vanslyke .......................................................... 265

XIV. The Effect of Collodion on the Amanita-Hemolysin. By William W. Ford .......................................................... 269

XV. The Distribution of Poisons in the Amanitas. By William W. Ford .......................................................... 275

CONTENTS

NUMBER 3, OCTOBER, 1909

XVII. Experimental Criticism of Recent Results in Testing Adrenalin. By W. H. Schultz ................................................................. 291
XVIII. On the Relation between the Toxicity and Chemical Constitution of a Number of Derivatives of Choline and Analogous Compounds. By Reid Hunt and R. deM. Taveau ....................................................... 303
XIX. The Action of Adrenalin on the Pulmonary Vessels. By Carl J. Wiggers ................................................................. 341
XX. A Clinical Study of Crystalline Strophanthin. By Harold C. Bailey ................................................................. 349
XXI. The Life-saving Action of Physostigmin in Poisoning by Magnesium Salts. By Don R. Joseph and S. J. Meltzer ................................................................. 369

NUMBER 4, JANUARY, 1910

XXII. Note on the Amanita-Torin. By William W. Ford and Ira H. Prouty 389
XXV. On the Toxicity of Dextro-, Laevo- and Inactive Camphor. By W. E. Grove 445
XXVI. Apparatus for Recording the Outflow of Liquids. By William R. Williams 457

NUMBER 5, MARCH, 1910

XXVII. Anastomosis between the Portal Vein and the Inferior Vena Cava (Eck's Fistula). By Bertram M. Bernheim, John Homans and Carl Voegtlin 463
XXVIII. The Pharmacologic Action of Certain Protein Cleavage Products upon the Heart. By R. B. Gibson and W. H. Schultz 469
XXIX. The Influence of Alcohol on the Composition of Urine. By William Salant and F. C. Hinkel 493
XXX. A Poisonous Principle in Certain Cotton-seed Meals. By Albert C. Crawford 519
XXXII. Proceedings of the American Society for Pharmacology and Experimental Therapeutics 569

NUMBER 6, JUNE, 1910

XXXIII. An Experimental and Clinical Study of the Functional Activity of the Kidneys by Means of Phenolsulphonephthalein. By L. G. Rowntree and J. T. Geraghty 579
XXXIV. A Practical Method for the Preparation of Phenolsulphonephthalein By Edgar A. Sagle 662
ILLUSTRATIONS

Conductivities plotted along vertical and dilutions along horizontal axis (Fig. 1) ................................................ 70
Adrenalin after ergotoxin in a cat (Tracing 1) ........................................... 142
From dog. Effect of injection 2 mg. nicotine (Tracing 2) ......................... 143
From same dog as tracing 2 (Tracing 3) ................................................. 144
From dog. Effect of asphyxia (Tracing 4) ............................................... 146
From dog. Effect of stimulation of central end of cut vagus (Tracing 5) .... 148
Curves of a first vaccination with cowpox (Fig. 1) ................................ 152
Consecutive vaccinations. Development of “Allergy” (Fig. 2) .................. 153
Quantitative experiments with tuberculin (Fig. 3) ................................. 155
Field of vaccination under tangential illumination (Fig. 4) ..................... 161
Field of vaccination under vertical illumination (Fig. 5) ........................ 163
Field of vaccination (Fig. 6) ................................................................. 164
Course of reaction of point \( \alpha \) (Fig. 7) ............................................. 165
Course of reaction of point \( \delta \) (Fig. 8) .............................................. 166
Course of reaction of tuberculin 32 times diluted (Fig. 9) ...................... 167
Course of reaction of tuberculin 256 times diluted (Fig. 10) .................. 168
Average curve of dilution 1 : 4 + average points of two single curves (Fig. 11) 169
Average curves 1, 4, 16, 64, 256 (Fig. 12) ........................................ 170
Average curves 2, 8, 32, 128, 512 (Fig. 13) ...................................... 170
Dilution and diameter (Fig. 14) ......................................................... 172
Influence of both factors on the course of reaction (Fig. 15) ................... 173
Automatic winding device for kymograph (Fig. 1) ................................. 176
Clutch of the automatic winding device for kymograph (Fig. 2) .............. 177
Apparatus for registering injections (Fig. 3) ........................................ 179
Improved apparatus for registering injections (Fig. 4) ........................... 180
A nerve stimulating apparatus (Fig. 5) ............................................... 181
A combined signal and base line (Fig. 6) .......................................... 182
Cat, ergot 0.5 cc., B. W. and Co. liquid extract intravenous (Tracing 1) .... 220
Cat, ergot 1 cc., P. D. and Co. aseptic ergot (Tracing 2) ...................... 221
Cat, ergot 0.75 cc., B. W. and Co. liquid extract intravenous (Tracing 3) .... 222
Cat, pregnant near full term, ergotoxine 0.5 mgm. (Tracing 5) ............. 224
Cat, uterine contractions and blood-pressure (Tracing 6) ........................ 225
Cat, uterine contractions and blood pressure (Tracing 7) ........................ 226
Uterine contractions from a cat about 6 weeks pregnant on receiving equal fractions of the average recommended dose, etc. (Tracing 8) .... 227
Cat, intracerebral magnesium chloride, in shock, (Tracing 9) ............... 228
At 11.54, 0.66 ergotoxine intravenously (Tracing 10) ........................... 229
Apparatus to produce a rhythmical perfusion stream through the lungs (Fig. 1) 344
Effect of adrenalin (1 mg.) on perfused lungs (Fig. 2) .......................... 346
Segments of 3 records showing the effect of the adrenalin solvent on the pulmonary vessels perfused with saline gelatin solution (Fig. 3) 348

Jugular (upper) and radial tracings (Tracing 1) 352
One hour after injection (Tracing 2) 353
Four hours after injection (Tracing 3) 353
Very irregular rhythm. Groups of extra systoles (Tracing 4) 354
Eighteen hours after preceding tracing (Tracing 5) 354
Thirty hours after last strophanthin injection (Tracing 6) 355
Five hours later than the preceding. Tracing four hours after an injection of strophanthin (Tracing 7) 355
Rapid and irregular pulse. Groups of extra systoles (Tracing 8) 356
Taken the same hour as the preceding tracing but at a faster speed (Tracing 9) 356
Apex (upper) and radial tracing showing that there is an extra beat at the apex that is not perceptible at the wrist (Tracing 9) 356
Apex (upper) and radial tracings showing that each beat at the heart goes through to the wrist (Tracings 10 and 11) 357
Jugular (upper) and radial tracings. Pulse very rapid and irregular. (Tracing 12) 360
Twenty-four hours later than preceding tracing. Rhythm still somewhat irregular due to extra systoles (Tracing 13) 360
Three days after treatment was started (Tracing 14) 360
Jugular (upper) and radial. Tricuspid. Regurgitation present (Tracing 15) 361
Radial tracing following day, four hours before death and eleven hours after the last injection (Tracing 16) 361
Radial tracing (Tracing 17) 362
Jugular and radial. Tricuspid regurgitation. Nodal rhythm (Tracing 18) 362
Jugular (upper) and radial. Three hours before death and ten hours after last injection (Tracing 19) 362
Respiratory tracing by pneumograph, inspiration upwards (Fig. 1) 378
Respiratory tracing by pleural cannula; inspiration downward (Fig. 2) 379
Shows the effect of the direct application to the frog's heart of a 0.1 per cent solution of urea in Ringer's fluid (Fig. 1) 395
Plethysmographic record of the terrapin's heart under artificial perfusion (Fig 2) 395
Effect of urea upon a sino-auricular strip from a terrapin's heart, (Fig. 3) 396
Shows the effects of the application of a 3 per cent solution of urea in Ringer's fluid to the frog's heart (Fig. 4) 397
Shows the effects of urea on the blood pressure and cardiac output in the cat (Fig. 5) 402
Shows the continued dilation of the intestines with unchanged mean arterial pressure following the injection of urea (Fig. 6) 403
Shows the effects of urea on the volume of the kidney. Cat (Fig. 7) 405
Plethysmographic record of the intestinal volume and the mean arterial pressure. Cat (Fig. 8) 406
Drop recorder; 1, clamp for glass tube; 2, wing-nut on adjustment for clamp; 3, frame of brass, etc. (Fig. 1) 458
Tipping bucket, to be substituted for the tilting plate for more rapid flow (Fig. 2) 459
ILLUSTRATIONS

Simple form of frame for tilting plate and tipping bucket (Fig. 3) 460
Tracing from diuresis experiment. Dog. Morphine and chloretone anesthesia (Fig. 4) 461
Dog. Amputated hind leg. Canula in femoral artery, perfused with Ringer's solution, venous outflow recorded by means of tipping bucket (Fig. 5) 462
Ligature around portal vein. First continuous suture placed, second begun and dots showing its continuation (Fig. 1) 465
Second continuous suture finished. Mattress suture placed and scissors in position to enter (Fig. 2) 465
Effect of edestinose upon the excised cat heart (Fig. 1) 475
Effect of 0.5 per cent edestinose upon the excised cat heart (Fig. 2) 476
Effect of 2 per cent edestinose upon the excised cat heart (Fig. 3) 479
Effect of edestinose ash (2.0%) upon the excised cat heart (Fig. 4) 480
Effect of 4.0 per cent edestinose upon the frog heart in situ (Fig. 5) 481
Effect of alcohol soluble edestinose upon the frog heart (Fig. 6) 482
Effect of edestin-peptone upon the frog heart (Fig. 7) 483
Effect of 1.0 per cent alcohol-soluble caseose upon the frog heart (Fig. 8) 484
Effect of 2 per cent alcohol-soluble egg-albumin proteose upon the frog heart (Fig. 9) 487
Effect of fibrinose upon the frog heart (Fig. 10) 488
Effect of 2.0 per cent Witte peptone upon the frog heart (Fig. 11) 489
Small intestine from a non-sensitized guinea-pig treated with pure horse serum and with boiled serum (Fig. 1) 533
Small intestine from sensitized and from non-sensitized guinea-pigs treated with pure horse serum (Fig. 2) 554
Small intestine from a sensitized guinea-pig treated with pure and with boiled horse serum (Fig. 3) 559
Small intestine from a sensitized guinea-pig treated with pure and with boiled horse serum (Fig. 4) 560